

Backwoods

July/August 2003
No. 82
\$4.95 US
\$6.50 CAN

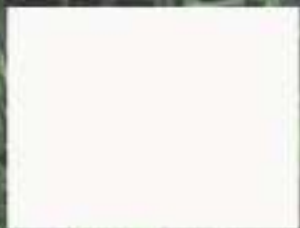


Home magazine

practical ideas for self-reliant living

Choosing the right backup generator

Making dandelions palatable
Successful cold storage
Defeating debt
Cooking with cornmeal
Grow and store herbs
Making healthy yogurt
Healthy homemade meals
Supercharge your AM radio



www.backwoodshome.com

Backwoods Home Magazine is written for people who have a desire to pursue personal independence, self sufficiency, and their dreams. It offers "how to" articles on owner-built housing, independent energy, gardening, health, self-employment, country living, and other topics related to an independent and self-reliant lifestyle.

Publisher/Editor: Dave Duffy
Art Director: Don Childers
Senior Editor: John Silveira
Gun Editor: Massad Ayoob
Business Manager: Ilene Duffy
National Advertising Director: Ron Graham
Webmaster: Oliver Del Signore
Administrative Assistants: Nathele Graham,
Muriel Sutherland, Lisa Nourse, Edwina Gower

CONTRIBUTORS:

Gary F. Arnet, D.D.S., Jackie Clay, Bob Clay, Massad Ayoob, Habeeb Salloum, Robert Waters, John Kallas, Jeffrey Yago, Tom and Joanne O'Toole, Charles Sanders, Dr. Bill Glade, Don Chance, Rebecca Payne, Sylvia Gist, Sharon Palmer, Dorothy Ainsworth, Gene Ainsworth, Tom Kovach, Gaynya Tallmadge, John Dean, Rev. J.D. Hooker, O.E. MacDougal

SUBSCRIPTIONS:

Yearly subscription of six issues is \$21.95. Two years is \$39.95. Send check or money order to *Backwoods Home Magazine*, P.O. Box 712, Gold Beach, OR 97444. A subscription form is on page 89. For information call (541) 247-8900. Credit card orders only call: (800) 835-2418.

E-mail address: editor@backwoodshome.com
Internet address: www.backwoodshome.com

ADVERTISING:

Current printing is approximately 60,000. Classified advertising submission form and rates are on page 83. For display advertising rates, call Ron Graham (800-835-2418) or e-mail him at ron@backwoodshome.com.

DISCLAIMER:

Backwoods Home Magazine strives for accuracy in its articles and honesty in its advertisements, but the publisher and editors assume no responsibility for injuries or loss incurred by anyone utilizing the information in the articles or responding to the ads. Copyright 2003.

IDENTIFICATION STATEMENT:

Backwoods Home Magazine (ISSN No. 1050-9712) is published bimonthly (six times a year) for \$21.95 per year by *Backwoods Home Magazine, Inc.*, 29304 Ellensburg Ave., Gold Beach, OR 97444. Periodicals Postage Rate is paid at Gold Beach, OR, and additional mailing offices. POSTMASTER: Send address changes to *Backwoods Home Magazine*, PO Box 712, Gold Beach, OR 97444.

Published in Gold Beach, Oregon, U.S.A.

DEPARTMENTS

- 6 **Publisher's Note**
- 7 **Editorial:** Gulf War II opened the eyes of Americans to the U.N. and the media
- 78 **Ask Jackie:** Castrating cattle, moving to a cabin, propane refrigeration, cleaning the grease out of range hoods
- 73 **Ayoob on Firearms:** Shooting left-handed
- 57 **Irreverent joke page**
- 50 **The gee-whiz! page**
- 81 **Letters**
- 86 **Advertiser Index**
- 83 **Classified ads**
- 83 **Classified advertising form**
- 91-98 **BHM anthologies, CD-ROMs, & books**
- 88-89 **Order form/Subscription information**
- 87 **The last word:** The curse of oil
For a subscription
Call toll-free 1-800-835-2418

ABOUT THE COVER

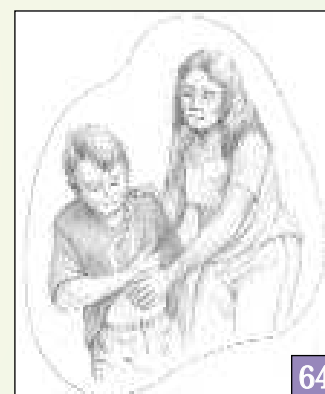
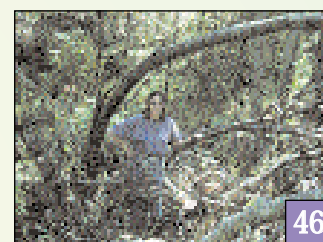
This issue our cover is a photo by John Kallas whose article, *Making dandelions palatable*, leads the issue. Though most of us think of it as an obnoxious weed, for ages it has been regarded as a source of delicious and nutritious food. Delicious? Yes. When properly prepared, dandelion greens can brighten up a dinner plate, a soup, or a salad. And then there's dandelion wine, made from the petals that make up that pretty yellow flower that covers hillsides and meadows from spring to autumn.



FEATURES

Self-reliance

- 8 **Making dandelions palatable** By John Kallas, Ph.D.
- 13 **Dandelion facts and history** By Tom and Joanne O'Toole
- 28 **The informed juror** By Dr. Gary F. Arnet
Many of America's problems may be solved by one thing—jury trials before informed jurors.
- 46 **Logging Grandma's farm** By Rebecca Payne
What you should prepare for before you decide to have your land lumbered.
- 51 **Alternative lifestyles** By Dorothy Ainsworth
What was a single dad's solution to living with two teenaged sons? Three trailers!
- 40 **Taking valerian to bed** By Sharon Palmer
Got insomnia? Before you try prescription or over-the-counter drugs, perhaps you should try this natural alternative.
- 58 **Defeating debt** By Don Chance
Debt may be the biggest barrier to moving to the backwoods. The solution may be simpler than you think: bankruptcy. Don Chance tells you what to consider.
- 64 **Diagnosing appendicitis** By Dr. Bill Glade
- 66 **Supercharge your AM radio** By Charles Sanders
- 71 **Chapter 4: The last ride of 'Yo Roller** By Robert Waters
The eyes of the armed robber and the pharmacist, Dennis Grehl, locked. Grehl reached for his own gun. The outcome was like a quick-draw in Dodge City.



Independent energy

- 16 **How to select the right backup generator** By Jeffrey Yago, P.E., CEM

Food and recipes

- 15 **Dandelion recipes** By Tom and Joanne O'Toole
- 25 **Making wild nuts into nut oil, nut meal, & nut butter** By Rev. J.D. Hooker
- 26 **Cornmeal cooking** By Gaynya Tallmadge
- 33 **The amazing yogurt** By Habeeb Salloum
- 35 **Successful cold storage** By Sylvia Gist
- 42 **Chokecherries** By Jackie Clay
- 53 **Homemade** By Jackie Clay
Cottage cheese, rhubarb pie, lemon custard pudding cake, pasties, beef stew, biscuits, butter, grouse breast.
- 70 **Tomato canning tips** By Tom Kovach

Farm and garden

- 23 **Growing and storing herbs** By Tom R. Kovach
- 62 **A simple backwoods hay baler** By Rev. J.D. Hooker



Publisher's Note

Adopting U.S. Marines

Between issues, *BHM* became involved in the war in Iraq in a morale role. It all started after deadline for last issue as I watched my daughter, Annie, make up a care package for her husband, Marine PFC Erik Tuttle, who was with Alpha Company of the 3rd Light Armored Reconnaissance (LAR) Battalion in Kuwait awaiting the start of the war.

I asked her if anyone else in his Light Armored Vehicle (LAV) unit was married. When she told me he was the only one, it occurred to me that most of them probably don't get too many care packages from home. I know when I was in the Army during the Vietnam era, I didn't.

So my daughter told me about a program where you can temporarily "adopt" a member of the armed forces and send him or her a care package once a month while they're overseas. We decided that *Backwoods Home Magazine* would adopt her husband's entire 11-man squad, and we sent each of them a care package. It included goodies like disposable razors, old spice wipes, powerbars, candies, beef jerky, trail mix, toys (they're 18 and 19-year-olds, after all), toothbrushes, foot powder, a disposable camera.

I wrote a three-paragraph article about it on our website, www.backwoodshome.com, and several days later updated them with a note that Rick Levanthal of Fox News was an embedded reporter with the 3rd LAR and we would be carrying his reports. Our daily reports quickly became the most popular part of our website, with Marine Corps wives, girlfriends, and family relying on it for news of their Marines. We captured Levanthal's video reports live, and began piecing together other news of the 3rd LAR and put them together in an informative manner. Letters to the website flooded in, with families sharing what information about the 3rd LAR they had found. People began sending in photos of their Marines and we posted them too (73 as of this writing).

The site just kept growing, and the 3rd LAR was engaged in some fierce fighting, plus they were the Marines who recovered the seven American POWs south of Tikrit. As the fighting wound down, families began getting letters and phone calls from their Marines and they shared them with us on the website. It became "Information Central" for 3rd LAR families and friends. Here's part of one letter, from U.S. Marine LCpl. Nathan Laupp to his mom, Elissa Laupp, of _____ :

"On March 23, at about 19:45 Zulu, just after dark, 3rd LAR was moving up Route 1 between the Tigris & the Euphrates Rivers when we got ambushed!

"Our unit was the Northern-most unit in Iraq at the time. The order of march was as follows: Bravo Co., H&S forward to include my vehicle, Alpha Co, H&S Main, Echo Co., Delta Co., and combat trains.

"My LAV was the first behind Bravo Co. They were approx. 200 meters in front of us, when a truck carrying about 5 - 8 Iraqi soldiers attacked. Bravo killed all of them. 2 RPG rounds exploded in between LAV's. One Marine caught some frag in the back of his flak jacket. He was OK because it didn't go all the way through.

"About that time we noticed troops on both the East and the West sides, closing in on us. Bravo was the only ones to keep moving north, so my LAV was in front of everyone!!

"My Gunner, Sgt. Rollins, requested permission to open fire from our Battalion Commander, in the LAV with me. He was given the order to fire. He did not realize that he was in single shot Armor Piercing (AP). He fired his first round right through the chest of an Iraqi and watched him drop, realizing he wasn't shooting the 240 (7.62 mm) (it's a machine gun). He switched to it and then realized that it was jammed, so he had to go to HE (high explosives). He fired into groups of Iraqi soldiers, killing most and wounding what wasn't dead.

"In front, I had 4 LAV 25's all engaging troops in the open. We also had 2 C2's behind us (H&S forward) shooting troops with their 240s. The Iraqis kept trying to push but fell as they tried. I didn't feel sorry at all. The day before, a group of Iraqis captured 10 soldiers and video taped as they executed 5 on the spot. I don't know if they were Marines or not...doesn't matter, they were American, part of us. They took the other 5 and taped as they tortured them.

"My wing man noticed a truck driving towards them and he fired a 3 round burst, flipping the truck end over end with the 2nd. round. In front, we pushed the troops back about 2000 meters but behind us, they were much closer — within 50 meters. The whole convoy was engaged.

"One of the Marines shooting a 240 on a C2 pressed his butterfly trigger so hard he broke it off!! He saw a soldier move into a small building 20 meters away, the Iraqi peeked his head over the top, the Marine fired and watched the soldier's lifeless body fall into the open door way.

"Close to an hour after the first shot, the engagement ended. LAR bounded back to call in Air Support.

"When all was said and done the count was MANY Iraqis dead - no Marine casualties!!

"My LAV killed at least 30 troops that night. My LAV took no rounds to her hull. It was a complete victory in what we found out later was the Iraqi soldiers training area.

"I am fine. I remembered my training that night. (we all did!!) So, now I know that I can do what I've been trained to do."

Powerful stuff! We put everything—videos, letters, and all—on a CD-ROM and are giving a copy to every family of the 3rd LAR. Our small contribution. — **Dave**

My view

Gulf War II opened the eyes of Americans to the UN and the media

How many of you were tightly tuned to the TV like I was during Gulf War II. I hope a lot because it was a great education. Not just about the war, but about politics and the mass media.

The UN debate preceding the war was the most instructive view yet for the American public about where the UN stands when it comes to U.S. interests. Prior to this strident display of anti-Americanism, it was just a handful of malcontents like me saying that the UN was nothing but a collection of 3rd world countries working actively against America at every turn. Now most Americans know it.

France's participation in the debate was particularly edifying. This has-been nation that was freed with American blood from the Nazis in World War II frantically flew its diplomats around the world in an effort to garner UN Security Council votes that would defeat any American proposal about Iraq. America's diplomats have watched France work against U.S. interests for years, so it's about time that their anti-Americanism was put on public display for the entire American public to see.

Throughout the UN debate, America's mass media—with notable exceptions like *Fox TV News* and *U.S. News & World Report* magazine—featured “the fact” that “most of the world” was against President Bush's desire to go to war against Iraq. *CNN* et al highlighted the anti-American views of all the third world countries in the UN like they really mattered when it came to American strategic interests.

Just before the war commenced, *Newsweek* magazine featured a cover that screamed: “*Why America Scares the World*” and displayed a giant 21,500-pound MOAB bomb next to it. Inside the issue, the main article was titled: “*The Arrogant Empire*” with an introductory paragraph that read, “*America's unprecedented power scares the world, and the Bush Administration has only made it worse.*” At the same time, *U.S. News & World Report's* cover featured an American soldier under the headline “*Ready to Go,*” and its inside articles gave an in-depth account of America's preparations to topple a brutal dictatorship that may be a threat to America. *U.S. News* was engaged in reporting the news while *Newsweek* was engaged in anti-Americanism.

When President Bush finally went to war over UN objections, the UN faded into the background but the mass media kicked into high gear. I was glued to the TV with my 20-year-old daughter, Annie, whose Marine Corps husband was on the front lines, so I had a keen interest in what

was going on. But even I was unprepared for the distorted view of the war that *CNN* gave.

If you watched *CNN*, you'd have thought America's war plan was thrown into disarray by the “unexpected Iraqi defense.” There was no cheering in the streets to welcome the Americans as liberators, as President Bush had promised. Something must have gone terribly wrong!

But all you had to do was switch to *Fox TV News* to learn that the war plan was on track. It seems that *Fox* had no axe to grind, and no anti-Americanism to vent, so they reported the news as it unfolded. The first week of war was just that, *Fox* reported—the first week of war. It was not anticipated there would be an instant victory, and the Iraqi people needed assurances they would not be executed by Saddam's Fedayeen before they cheered for the liberating American troops.

I channel surfed my way through the war, switching among all the news channels—*CNN*, *CNN Headline News*, *CNNfn*, *Fox*, *MSNBC*. The *CNN* channels had America's “shock and awe” campaign failing, but showed Iraqi civilians, especially Iraqi children, being maimed and killed. *Fox News* had America's battle planning “stunningly successful” with little collateral damage and few civilian casualties.

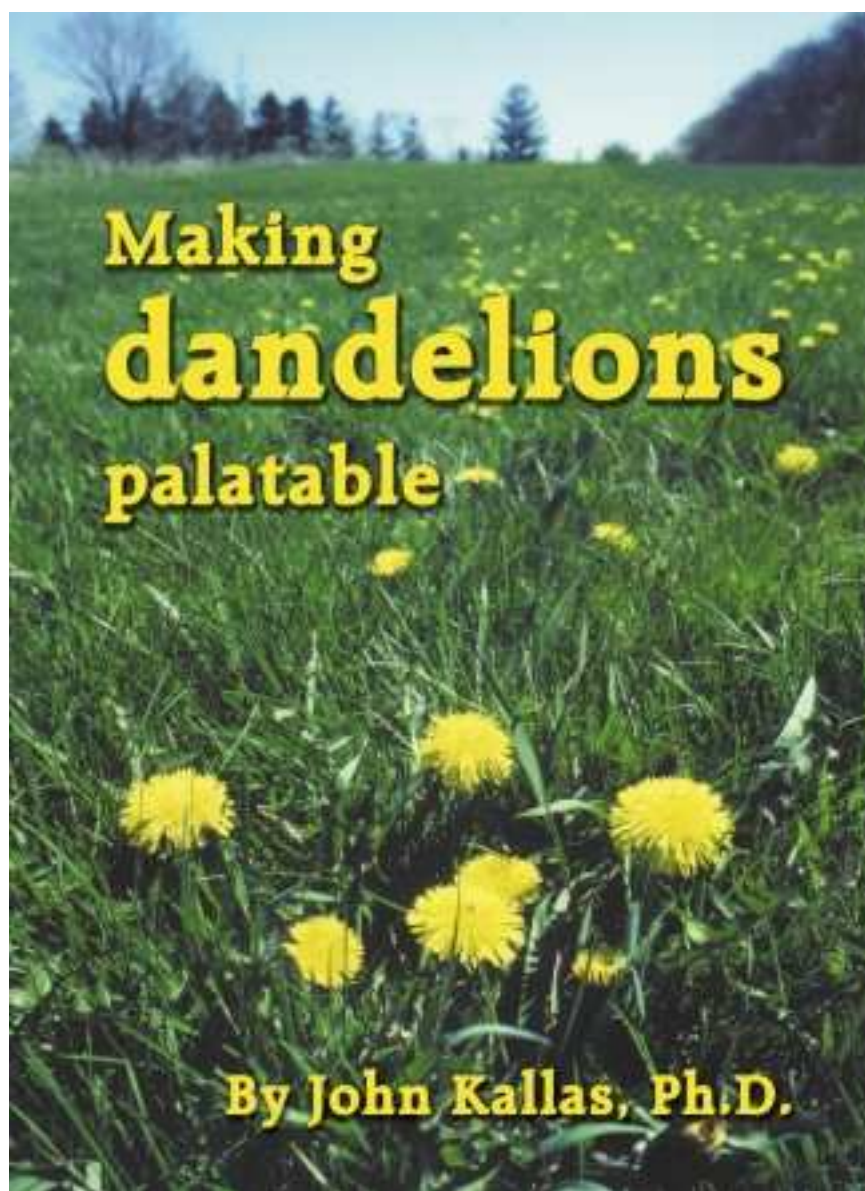
At the beginning of the war, *MSNBC* seemed to follow the *CNN* line with much negative reporting about America's war efforts, but as the war went into its second week, for some reason *MSNBC* began reporting the war like *Fox News*. They simply dropped their anti-American bias. *Newsweek* magazine, meanwhile, during the second week of the war, ran a special report issue with a cover featuring a bloodied American soldier in obvious agony under the headline, “*How Bloody?*” while *U.S. News's* cover ran a photo of an in-control Marine firing his M-16 under the headline, “*Taking Baghdad.*”

The difference in the war coverage was obvious for all Americans to see. *CNN* and its affiliates, along with news outlets like *Newsweek*, paraded what they perceived as American setbacks throughout the war, while *Fox* and news outlets like *U.S. News* paraded American success.

Guess who was telling the truth? — **Dave Duffy**



Dave Duffy



Dandelions growing in dense cut grass tend to be more bitter because of less shading and more root competition for water and nutrients.

We've heard stories about how good dandelions are. What one usually hears from enthusiastic wild food promoters is, "All you need to do is find very young dandelion leaves in the early spring, before the flower stalks appear. If you do this they won't be bitter. They'll be the most delicious and nutritious fresh greens you will ever eat."

Well my friends, that was not reflected in my early or continuing experiences with the plant. Was I doing something wrong? Why is it that you hear and read such good things about a plant that, even in its youth, is often excruciatingly bitter?

What I'm going to do is explain to you why I think that dandelions are indeed mostly bitter in the raw form—at almost any age—and share with you the secrets of transforming those same dandelions into the gen-

uinely delicious food that so many rave about. We'll also dispel some misconceptions and old folk tales so you can get some practical use out of this abundant food source.

When I was first learning primitive living skills, I was intrigued by the thought of surviving off of what nature provides. Of all the plants talked about in the few survival books I had collected, dandelions were familiar and they were right under foot. So being the adventurous testosterone-ridden young male that I was, I tried them. Yacht, pituey, spit-spit-spit, blah! Well, so much for machismo. The bitterness was overwhelming. This did not help my interest in plants. I phased into animals and other survival skills for a while so that my taste buds could grow back.

On occasion while I was still living at home, my mom, trying to emulate a tradition of our Greek ancestors, would prepare dandelions gathered in a nearby vacant lot. She would serve them and we would all be in agony. Of course my parents, trying to be good role models, would hide their pain in an effort to convince us that these greens were, in fact, good. Can any of you explain to me the psychology of this? I'm still baffled to this day.

Once I got to college I became a more serious student of wild foods. By more serious, I mean that I began reading beyond the "this plant is edible" statement to the "this is how you prepare it" section. To this day, this progression to the "how" section is difficult for many eager wannabe primitive technologists. Many people just want to know what's edible and do not have the patience to learn details. Knowing the details results in the understanding that allows you to be more successful and *enjoy* what you are eating.

According to the books I read, preparing dandelions basically involved boiling the leaves in one or more changes of water. You add more



Young dandelions growing from seed. These small leaves are bitter from birth unless totally shaded from all light.

boilings for greens that are more bitter. Authors varied greatly on how many boilings you should do. Most centered on two. I tried two. Done properly, the bitterness will be poured off with the water, leaving the wonderfully rich flavor of the dandelion greens behind. They become quite delicious. If boiled too long, the greens begin to disintegrate.

But some things I was reading and hearing did not add up. I was continually reading in books and hearing from certain individuals that dandelions were not bitter if you got them early enough in the spring. I cannot tell you how many times I tested this theory. The overwhelming mass of my experience was that even the youngest, tiniest leaves were bitter—too bitter, in the raw, for my tastes. Picking them in the early spring before the flower stalks appear is very difficult. The flower stalks appear almost at the same time as the leaves on the earliest dandelions. The early dandelions grow rapidly directly from nutrient providing taproots. Consequently, the small emerging spring leaves are not really required

to generate food for the growing flower stalk. The stalk can grow directly from the food provided by the taproot.

Even young dandelions growing directly from seed were bitter. Their lower stalks, totally growing by food generated from the leaves, would not develop until later in the spring.

While working on my Ph.D. about 20 year ago, I designed a survey-driven research project of senior citizens in a rural Michigan farming community. Many of these people were born between 1890 and 1910. Most had grown up in an era where there was no electricity, no cars, no supermarkets. They lived off canned, bagged, and bottled food they bought from the general store, whatever agricultural food they could produce or trade for, and wild foods they gathered from the surrounding area. The wild foods helped to spice up and add diversity to their diets. Dandelions were one of the most commonly eaten foods.



Dandelion leaves growing in tall grass that is well watered tend to be less bitter due to rapid growth, shading, and loose soil. Be careful not to gather in areas sprayed with herbicides, other chemicals, near roadsides, or railroad tracks.



This dandelion plant has gone to flower and seed, but the leaves are still workably bitter due to good shade, plenty of moisture, and rich soil, all of which promote continually growing new leaves.

When I asked these people if they experienced dandelions and dandelion salads to be bitter, almost everyone interviewed said no, dandelions were not bitter. I was wondering what planet I was visiting. Had all these farmers been replaced by alien pod people? What was I missing here? At some point, I began asking, “How did you prepare your salad?” This is what they told me: “You take a big mess of fresh dandelion greens, you cook up some bacon, you pour the hot grease over the dandelions, you chop up the bacon and sprinkle that over the greens, you cook up a couple of hard boiled eggs, chop them up and disperse them over the greens, you add salt and occasionally vinegar, and there you have it—dandelion salad (also known as wilted greens).

The gears in my brain now had something to work with. It was becoming more and more clear to me that anytime experienced dandelion eaters discussed flavor, it was within the context of how it was served, not the fresh plant straight from the

ground. Hardly anyone actually eats dandelions that way.

There are also psychological issues here that hide the fact that most people find the raw greens bitter.

First, people who like the “prepared” dandelions they’ve eaten all their lives tend to sing their praises. So even though dandelions are quite changed by the time most people are eating them, they praise the plant. People who consume the leaves fresh hear these praises and wonder what they are missing.

Second, when the inexperienced sample the much-hyped fresh dandelion leaves for the first time and don’t like them, they imagine that they are not picking them early enough or otherwise doing something wrong. How could all these dandelion lovers be wrong about the flavor of such a halloved plant? Some folks are afraid to admit that they cannot stand the flavor.

Third, there are many people today that believe that bitter is good for the liver and proper digestion and that dandelions are a healing food. So they learn over time to tolerate much more bitter than the rest of us. For many of these people bitter becomes an enjoyable flavor. They often describe dandelions as not being bitter. What they really mean is that, to them, the dandelions they eat are not so bitter that they cannot enjoy them. Enjoying bitter is not the same as something not being bitter.

Okay, so enough about what I’ve seen and experienced, let’s get on to the basic principles I’ve come up with that will help you enjoy dandelion greens.

Understanding the “bitter”

Dandelions are bitter because of a class of water soluble chemicals called sesquiterpenes. The key to enjoying dandelions is understanding how to work with these chemicals to

minimize their impact on your taste buds.

Sesquiterpenes are part of the milky juice that runs throughout the dandelion plant. They are everywhere except for the non-green flower parts. Sesquiterpenes are less concentrated in rapidly growing leaves, hence the thinking that young leaves are not bitter. Well, in fact they are bitter, just less bitter than they could be.

Here are my best theories on what increase the bitterness of dandelions. First, after the spring rains cease, the ground begins to dry. That drying slows the growth of the leaves allowing leaf bitterness to concentrate. Areas kept relatively wet allow dandelions to continue growing rapidly all year long. Second, the more direct sunlight that bakes a leaf, the more



A “mess” of cooked dandelion greens drizzled in olive oil and sprinkled with dandelion flower petals. Mmmm... wonderful flavor with no bitterness. These greens were cooked for five minutes in only one pot of water because the least bitter greens were selected for use.

sesquiterpenes develop, even in fast growing leaves. Plants growing in shaded areas or deep grass tend to be less bitter. The early spring sun maintains a lower arc across the sky than the summer sun. So less shaded summer leaves will be more bitter. In moist rich shaded soil, I have found optimal fresh dandelion leaves all year long. Note that they are still bitter to most normal humans, but not unworkable.

There are great differences in people regarding the sensation of bitter. People like me, endowed with lots of extra taste buds in the bitter sensitive zones of the tongue, are super tasters for bitter. We can taste bitter a mile away and that taste lingers miserably for some time after the food has been swallowed. Other people have almost no bitter taste buds. These are the people who look at us in disbelief as we agonizingly wince like babies over bitter greens. About one in every 25 of my students cannot taste bitter very well.

Managing the bitterness away

As a result of my extensive experience preparing dandelions and the little I know about the science of taste,



The author holding a wild salad.

here are some conclusions I've drawn to bring out the flavor of dandelion greens while limiting the bitter sensation.

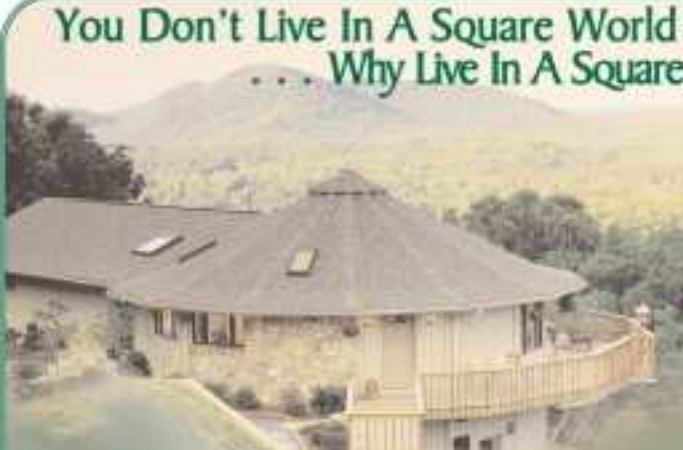
1. Dilution: This is where you mix your dandelions with something that dilutes the bitterness. This could include mixing it with milder greens (like miner's lettuce or chickweed) or putting in some dish with other ingredients so that the proportion of dandelion leaf is reduced relative to the overall food. One of the best ways to use fresh dandelions in a salad is to chop them into small pieces and sprinkle them over a mixed salad. The bitterness of the dandelions is lost, but the overall flavor of the salad is enhanced. The key to this is not making dandelions more than one-fifth the mass of the total salad and having the pieces be small enough so that they do not overwhelm the taste buds.

2. Masking: This is a taste bud thing. Fat is the main ingredient for doing this. This is why many of the old-timers (like the farmers mentioned earlier) poured bacon grease over their dandelions. My understanding is that fat, in the form of oils, butter, bacon grease, etc., cover taste bud receptors and reduce their sensitivity to the harshest forms of the bitterness. Fat also enhances the flavor of the greens.

3. Distracting: Adding sugar, vinegar, or other impactful flavor to a salad causes your brain to have competing taste sensations to the bitter one. This makes the bitterness less prominent and sometimes lost in the other flavors.

4. Leaching: This is the process mentioned earlier of boiling out the water soluble sesquiterpenes, leaving a wonderfully rich flavor. In my experience, using fresh, rapidly growing greens, you only have to boil them once for three to five minutes for them to release most of their bitterness. I typically just adorn them with a little olive oil and I'm a happy camper. The technique of leaching

**You Don't Live In A Square World . . .
... Why Live In A Square House?**



A DELTEC PROVIDES YOU:	DELTEC SUPPLIES YOU:
• Shell Prices from \$18 Sq. Ft.	• Pre-Cut Engineered Floor System
• Panoramic Views	• Pine, Cedar, or Vinyl Sided Wall Panels
• Twice the Energy Efficiency	• Doors and Preinstalled Windows
• Custom Design Flexibility	• Clear-Spanned Roof System
• Adaptability to Odd Lots	• Trim, Hardware, Decks, Plans
• Models from 300 to 8000 Sq. Ft.	• Delivery Nationwide

Call, Send, or Email for a Free Brochure.
Planning Catalog \$12.00, or \$19.95 with Video.

DELTEC HOMES 604 College Street Asheville, NC 28801
1.800.642.2508 www.deltechomes.com

Snorkel Wood-Fired Hot Tubs

Real WOOD HOT TUB
HALF THE COST
of Plastic Spas!

LOW-COST WOOD HEAT!
Gas/electric heaters, hydrotherapy jets optional!
10 Models! Made in USA!



• Utterly **RELAXING** – Practical, pleasurable way to unwind
• **100% WOOD Tub** – Naturally beautiful Western Red Cedar
• **UNDERWATER Wood Stove** – Ingenious, high-efficiency
• **Super AFFORDABLE** – Starting under \$1,900, pennies to heat
• **NO Electric, NO Plumbing** – Hassle-free enjoyment ANYWHERE

Mail this coupon or CALL TOLL FREE 1-800-962-6208

☐ **YES!** Rush me facts on SNORKEL Wood-Fired Hot Tubs including current SALE!

Name: _____
Address: _____
City/State/Zip: _____

FREE SALE CATALOG!

Snorkel Wood-Fired Hot Tubs
Dept. B0057A, 4216 6th Ave. South, Seattle, WA 98108, www.snorkel.com

goes like this: Start a pot of rapidly boiling water, chop up the greens to about one inch pieces, put them in the water, stir to keep them submerged. After 3 minutes, sample a small piece. If not bitter, remove the greens from the water and serve hot. If still bitter, leave the greens in the boiling water. Sample again after five minutes. If still bitter, consider transferring them into a second pot of boiling water for three to five minutes. In my opinion, if they need more cooking than that, they are too bitter.

Some people prefer diluting, masking, and distracting to leaching because they can still eat fresh uncooked leaves. Others prefer cooked greens. Of course nobody uses these labels outside of my students. Normal humans like the farmers mentioned earlier just prepare their foods so they taste good. They do not think of bacon grease, bacon bits, shredded hard boiled eggs, and vinegar as diluting, masking and distracting them from bitterness. They just like their salad dressing.

You are now armed with the kinds of information that will help you get more satisfaction out of your dandelion greens. For me, a melted cheese and dandelion sandwich sounds great right now.

(Dr. John Kallas is the owner of Wild Food Adventures, Institute for the Study of Edible Wild Plants and Other Foragables. He has been researching, teaching, and writing about wild foods for more than 25 years. For more information go to: www.wild-foodadventures.com, (503) 775-3828, Wild Food Adventures, 5036 SE Mitchell St, Portland, OR 98206.) Δ

NORWOOD
FABRICATING, INC.

LUMBERMATE™ 2000

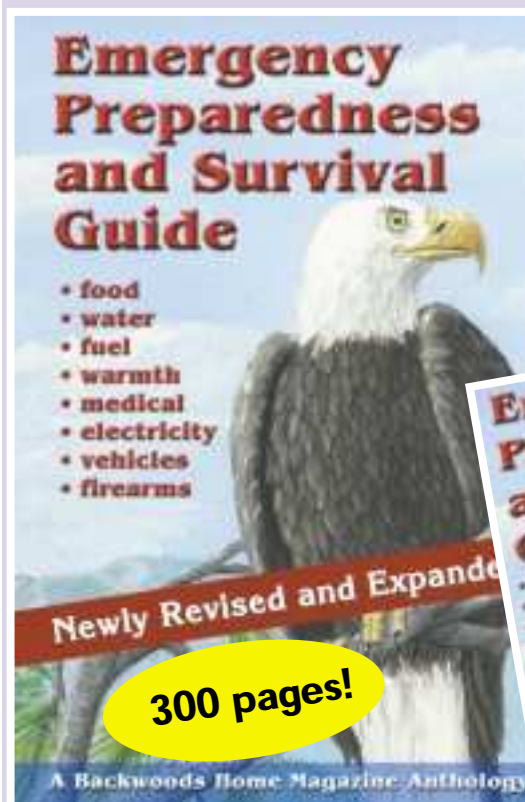
PORTABLE
BAND
SAWMILLS

\$3,895.

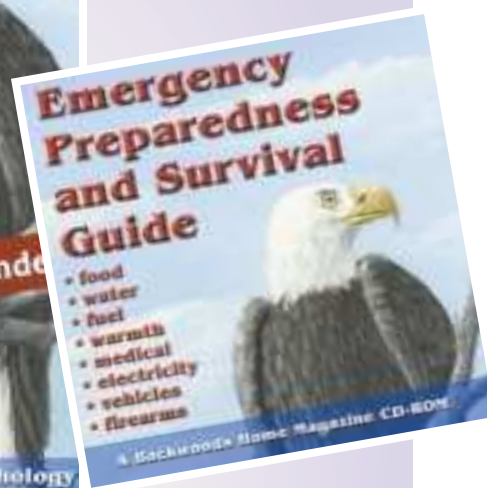
Ask about the NEW
ATV MultiMate L-1500

1-800-661-7746 Ext. 358 www.norwoodindustries.com
Norwood Industries Inc. • 252 Sonwil Drive, Buffalo, NY, U.S.A. 14225

HOPE FOR THE BEST PLAN FOR THE WORST



Our best-selling
anthology has
been updated
and expanded to
300 pages.



Newly revised and expanded- This anthology is composed of articles previously published in *BHM*. It contains all the information you need to know to safeguard yourself and your family in a time of crisis. We also have a companion CD-ROM containing dozens of articles comprising hundreds of pages.

Book ~ \$18.95 CD-ROM ~ \$12.95
Both for \$24

To order call 1-800-835-2418
or send check to *Backwoods Home Magazine*,
PO Box 712, Gold Beach, OR 97444



Dandelion

facts and history

By Tom and Joanne O'Toole

Easily recognized by its bright, golden-yellow flower, the dandelion has deeply-indented ground-hugging leaves, and a hollow stem containing a harmless, bitter, milky juice. The weed usually spuds out in early spring as soon as the leaves appear, but controlling it seems to be an endless battle—with the dandelion often winning.

Those who crave the unblemished lawn have little chance once the dandelion has taken hold. They just seem to pop up overnight every spring, and the plant stays around until the frost hits in the fall.

A European import by the settlers to the New World, the hearty perennial is generally found throughout North America and reproduces through abundant spreading seeds. In the United States it is plentiful on the Pacific coast, in the north central states, and throughout the northeast. In Canada it is most prevalent in the eastern provinces.

This weed is resilient for a number of reasons. Its long, thick, tough, carrot-like taproot can burrow up to three feet underground—making it difficult to eradicate. The Chinese call it “earth nail.”

The flower head is not one bloom, but a composite of hundreds of mini-flowers, each independent of one another. These sunburst blossoms at the end of the stem turn into white, fluffy seedballs. They then blow off in all directions, spreading their seeds and finding root for the next year. The seeds are conceived without pollination or fertilization.

The leaves grow in a flat, rosette arrangement and only the hollow stalk shoots up to present what appears to be a single blossom. The weed's built-in clock is controlled by light, telling the flower to close each evening and to open again at sunrise.

The name dandelion dates back to medieval France. Noting the jagged edges of the plant's leaves, the French called it “dent-de-lion,” meaning tooth of the lion.

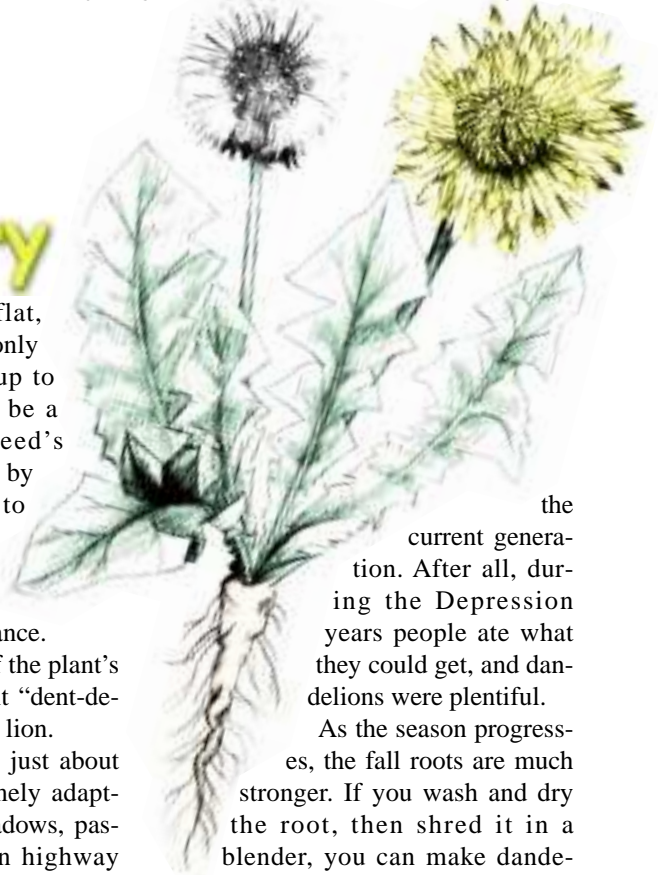
The resilient pest grows just about everywhere, and is extremely adaptable. You'll find it in meadows, pastures, along roadsides, in highway medians, in public parks, and grasslands. If you're in the mood for picking, it shouldn't be difficult to find.

Dandelion leaves are sold commercially in the northeast, but their popularity is not widespread. Yet, the weed offers a little something for everyone.

While the leaves can be plucked anytime, they are best in the early spring before the flower blooms and the leaves turn too bitter. The spring roots are also tender.

The best salads are made with fresh-picked leaves, and are seasoned like any other. They will be somewhat tangy and chewy. Some people even dip the leaves in batter and make dandelion fritters.

Some people serve dandelion salad because it is chic, and perhaps force it down no matter how bad it might taste. The young leaves are also cooked like spinach and served with the main course. Obviously, if it doesn't agree with you, don't eat it, and under these circumstances don't serve it to guests. Old-timers have probably acquired the taste more than



the current generation. After all, during the Depression years people ate what they could get, and dandelions were plentiful.

As the season progresses, the fall roots are much stronger. If you wash and dry the root, then shred it in a blender, you can make dandelion tea. Some claim the tea helps people relax. If you roast the ground roots, you can make your own gourmet coffee substitute, or mix it with chocolate or coffee.

Dandelion wine became popular because it was inexpensive to make. It's still made, with the bloom making the best wine. With some families the process has been handed down, and the new generation continues to make it more as a tradition than anything else. It seems old habits die hard. Not a big seller as a commercial product, you'll likely find only a wine recipe—then you're on your own.

Medicinal? The dandelion has long been on the list of home remedies for whatever ails you. American colonists found its broth eased digestion and worked as a mild laxative. Perhaps the bitterness had something to do with thinking it was helpful. Like taking cod liver oil, if it tastes bad it must be good for you.

The dandelion was one of the more than 2,000 herbs used when the settlers came from England. The roots

have been used in tonics and liver cures, as well as to stem infections, skin diseases, dropsy, and to settle the digestive tract.

The medical virtues of the dandelion are inscribed in its scientific name (*Taraxacum Officinale*) which means "official remedy for disorders."

Chinese prescribed the dandelion to treat appendicitis, abscesses, swellings, and snake bites. In Europe it was the herb of choice for illnesses of the spleen, kidney, heart, diabetes, high blood pressure, constipation, mononucleosis, and an aid to spring fever.

Dandelion juice was credited with removing warts, blisters, freckles, and growing hair on bald pates and eyebrows.

Packing four times the iron of spinach, dandelions are sold throughout the northeast region of North America, and are frequently found at roadside markets.

Dandelions are an excellent source of vitamin A, some B, and contain protein, calcium, iron, sodium, phosphorus, and a decent amount of vitamin C, magnesium, and potassium. Best of all, they are very low in calories.

Culinary respect? The dandelion leaves you find at markets are probably commercially grown, and it is a big business in some areas. The commercial product is grown under sheets of plastic to bring it to an early harvest, and it is less bitter than what you'd pick in your yard. Some supermarkets even stock leaves of the common weed.

Vineland, New Jersey, lays claim to being the "Dandelion Capital of the World" and contends more dandelions are grown here as salad greens than anywhere else in North America. Δ

Wanna be self-reliant?
Go to:
www.backwoodshome.com

1/2 Price Sale

**10 copies
for only \$84.95**

(includes shipping)

**Give the gift of
preparedness to
your friends
and family.**



Call 1-800-835-2418 or send check to
Backwoods Home Magazine
P.O. Box 712, Gold Beach, OR 97444
www.backwoodshome.com
1-800-835-2418

Dandelion recipes

By Tom and Joanne O'Toole

For dandelion gourmets there are many ways to prepare this amazing weed, and to include it in soups, salads, main courses, desserts, and wine.

Here are a few recipes you might want to try.

Dandelion soup

- 2 quarts dandelion greens, loosely packed
- 2 quarts chicken soup
- 1 lb. mixed ground beef, veal, and pork
- 1 egg
- 2 Tbsp. bread crumbs
- 2 Tbsp. minced parsley
- 1 Tbsp. minced onions (extra fine)
- ¼ tsp. salt
- ⅛ tsp. seasoned pepper
- Dash nutmeg
- 3 Tbsp. grated parmesan cheese
- 2 Tbsp. sour cream

Bring chicken soup to a boil. Add dandelion. Cook gently. If desired, ½ cup rice or 1 cup fine egg noodles can be added. Make very tiny meatballs out of remaining ingredients. When greens are tender, add meatballs and cook gently 10 minutes or until meatballs are thoroughly cooked. Serve hot with Italian or French bread.

Dandelion salad with eggs

- 2 quarts cleaned dandelion (cut into ½-inch pieces)
- ½ medium-sized onion, minced very fine
- oil (olive or as desired)
- vinegar (wine or as desired)
- (Proportion of oil to vinegar is 3:1)

Season with ½ tsp. salt and ⅛ tsp. garlic salt. Dry the cleaned dandelion carefully. Mix all of the ingredients together gently. Then taste and add more seasonings as needed.

Boil enough hard boiled eggs to allow at least 2 per person. Eggs may be sliced into the salad. However, many prefer to serve the eggs separately, letting each person help himself.

Italian dandelion casserole

- 1 lb. ground beef (or beef and pork mixed)
- 1 cup bread crumbs
- 2 Tbsp. chopped parsley
- 2 Tbsp. finely chopped onion
- 1 tsp. salt
- 1 egg

- ¼ cup milk
- 6-8 cups dandelion greens
- 1 15 oz. can tomatoes, drained
- 1 cup chicken stock or bouillon
- salt and pepper to taste

Mix together meat, bread crumbs, parsley, onion, salt, egg, and milk. Form 40 to 45 small meatballs about 1 inch in diameter. Brown them in oil. Drain and set aside. Wash dandelion greens. In a buttered casserole alternate layers of dandelions, browned meatballs, and tomatoes. Add the chicken stock or bouillon. Season with salt and pepper and simmer 20-30 minutes. Yields 6-8 servings. When serving the casserole, have hot pepper flakes and Parmesan cheese available on the table.

Variations:

1. Add a layer of onions.
2. Season the meatballs with garlic salt or add finely chopped garlic to the casserole.
3. Add other herbs—oregano, basil, or marjoram.

Dandelion wine

- 1 gallon flower heads
- 3 lbs. sugar
- 1 ounce yeast
- 1 gallon water
- 2 lemons

Remove petals by gathering them between the fingers while holding the base of the flower head. Put petals in the fermenting vessel and pour on three quarts of boiling water. Leave to soak for seven days, well covered. Stir daily and cover again at once. Strain and wring out fairly tightly and return the liquor to the fermenting vessel. Boil half the sugar in a pint of water and when cool add to the liquor, then add the yeast and the juice of two lemons.

Cover as directed and ferment for seven days. Then pour carefully into a gallon jar, leaving as much deposit behind as you can. Boil the rest of the sugar in the remaining pint of water and when cool add to the rest. Cover as directed or fit fermentation lock and leave until all fermentation has ceased.

For more ways to satisfy your palate, you can purchase *Dandelion and Regional Favorites Recipe Book*, with 16 recipes for dandelion specialties, from the Greater Vineland Chamber of Commerce for \$4.50. Write to 18 North East Avenue, P.O. Box 489, Vineland, New Jersey 08360-0489. (800) 309-0019. Δ

How to select the right backup generator

By Jeffrey R. Yago, P.E., CEM

Now that the threat of terrorist sabotage to our utility infrastructure has been added to our basic concerns about storm related power outages, this may be the final straw in your decision to purchase a generator. If you are considering buying a generator for your home or farm, the first step is deciding what you want to operate when the power goes out. This will help determine the kilowatt (kW) capacity of the generator, the engine type (gasoline, propane, natural gas, or diesel), and installation wiring (plug-in or permanently connected).

You also need to consider how often you will need a generator. If you live near a large city served by multiple power lines, power outages will be rare and last hours, not days. The more rural your area, the fewer the utility customers affected when a utility line goes down, and that means a long wait since utility crews will address those lines serving the most customers first.

Some parts of the United States historically have more storm related power outages than others. Northern states have more winter snowstorms, Eastern states have more ice storms, Southern states have more hurricanes and Western states have more tornadoes, earthquakes, and rainstorms. California has recently demonstrated that utility grid interruptions and brownouts are not always winter storm related. Do you live in an area that has a history of extended power outages? If so, then maybe it is time you did something about it and purchase a generator.

There are generally three categories of generators for the residential market, and each have very different capabilities.

Portable generator

This is the typical portable 1-kW to 3-kW generator you find in most outdoor equipment and discount warehouse outlets. With few exceptions, these will have a small gasoline tank providing limited operating hours, a manual pull-starter, a handle for one person lifting, and a plug-in outlet panel to connect your electrical loads using extension cords. These generators have small lawnmower style mufflers which can be loud, and their lightweight construction and high 3,600 RPM engine speed limits their life to only a few seasons. Their main advantages are low cost (\$400 to \$600) and portability.

The portable generators in the smaller kW sizes are more suitable for camping, since they can only power a few lights, a small television, and several small appliances. The larger kW sizes have enough capacity to power a kitchen size refrigerator or well pump. These generators are not designed to be hard wired into your house wiring, and their higher noise levels and need for constant refueling reduces their desirability for a permanent back-up power system.

Contractor grade generator

Although still considered a portable gasoline generator, most of these generators use heavier cast iron engines that will provide much longer life. These generators are in the 4-kW to 6-kW capacity range, which is only slightly larger than the portable gen-



6.5 kW contractor grade Yamaha generator



*1-kW lightweight
Honda portable generator*

erators above, but are designed for much heavier use. Most of these generators have a protective tubular steel cage with a top mounted oversized fuel tank for longer run times between fill-ups. Units above 6-kW usually have two-cylinder engines and electric starters. Expect to pay \$1,200 base price for this size generator and over \$2,000 for a larger electric start model. This is the minimum size and quality generator I would recommend for anyone wanting a do-it-yourself back-up power system for their home.

Residential backup generator

There is no pretense here; these generators are designed to be permanently mounted on an outside pad and hard wired into your home's electrical circuit breaker panel. Although these are available with a standard gasoline engine, most are designed to run on propane or natural gas to eliminate the need to refill a fuel tank. These generators are also sold with long life diesel engines, but this will require keeping a fresh supply of diesel fuel available which may not be practical for some homeowners, although diesel fuel is safer to handle and more economical than gasoline.

These generators are available in any size you could imagine; however,



EM700 single gate opener **\$469.00**
EM702 double gate opener **\$739.00**
EM135 extra transmitter **\$28.99**
EM134 keychain transmitter **\$28.99**
EM137 15-code dig. keypad **\$65.00**
EM143 auto gate lock **\$159.00**
EM121 solar charger option **\$125.99**



For Single Gates Up to 12 Feet Long and Up to 250 Pounds

Low Voltage system, no electrician needed.

Easy to install self-contained arm-no control box needed.

Kit comes complete with: 12 Volt battery, transformer, installation video and manual, mounting hardware, one transmitter and receiver.

Listed in Compliance with UL 325, gate operator safety standards.

Special \$365.00 including shipping in Continental USA

Solar Discount

P.O. Box 986
 Mayer, AZ 86333
 Phone: (928) 632-4209
 Order: (866) 200-8024
www.solardiscount.com
 Package Systems * Inverters
 Pumps * PV Panels * Accessories



Kohler automatic transfer switch

8-kW to 10-kW is considered the minimum size range for permanent residential back-up power applications. Expect to pay \$4,000 to \$6,000 for this size generator depending on quality and safety options, and more for a longer life diesel engine version. Once you make it past the initial price shock for a generator this size, you will be pleasantly surprised to find that the larger 12-kW to 16-kW residential models are not that much more expensive. If you need to power more loads at the same time like an air conditioner, central heating system, or electric hot water tank, then you may need a generator in this larger size range.

These permanently installed generators are much better suited for residential emergency back-up power systems than portable generators, since they include a sound absorbing weather-proof housing, a very good noise reduction muffler, and a slower 1800 RPM engine which greatly extends engine life. You will need a plumber to safely connect the unit to an existing natural gas or propane supply line, and an electrician to wire the generator to an electrical transfer

switch which will be wired into your home's main circuit breaker panel.

Transfer switches

Of course you can drag your generator out of the garage during the next power outage and string multiple extension cords through an open window to your television, table lamps, and refrigerator. This can be very enlightening, especially during a rainstorm, as you trip over the kids and dog in the dark while stringing wet extension cords from one end to the other.

Up until a few years ago most transfer switches were large and costly, and only found on large commercial back-up generators serving hospitals, schools, and airports. These large devices are designed to constantly monitor the utility grid for a power outage, automatically start the generator, and safely transfer the emergency loads over from the grid to the generator. These automatic transfer switches also have a programmable timer to start and exercise the generator several times each month to keep everything operational, and provide operator warning alarms if the generator fails to start or has a service problem.

With the recent trend in more and more owner's of upscale homes and home-based businesses demanding their own reliable backup power system, manufacturers are now offering a much less expensive manual version of these transfer switches. Although manually operated transfer switches do not include the automatic generator start capability, they can be easily added to your home's electric panel. Since it is not practical to install a generator large

enough to power everything in your home at the same time, these smaller manual transfer switches have multiple three-way switches to allow transferring individual electrical loads between the generator and utility grid, depending on which loads are the most critical at a given time. This allows using a much smaller generator, without the danger of overloading that would occur if all of the appliances were connected at the same time.

Most manual transfer switch panels are sold with an extra long heavy duty cable and plug that allows connecting the transfer switch directly into the generator's power receptacle without the need for hard wiring or generator modifications. Although a manual transfer switch may add \$200 to \$400 to your generator installation cost, depending on size and quality, it is well worth the price if you are serious about a back-up power system. When the next power outage occurs, you still may need to manually start the generator, but switching your critical loads over is now safe and easy. No more extension cords and open windows with exposed wires running outside in the rain. Some transfer switches are available with dual meters to help balance the loads on each output leg of your generator.

I am reluctant to mention the cheap version of connecting a generator to a



8.5-kW propane-fueled Kohler generator

home's power wiring without a transfer switch, but I feel it is necessary to highlight the danger of this technique. Almost everyone will have a brother-in-law who thinks they are an electrician, who wants to make a double ended dryer outlet extension cord for your portable generator to save money. My advice is do not ever think about it. This old trick uses an electric cable with a male plug on both ends that connect the generator's 240-volt outlet with your three-bladed electrical dryer receptacle.

This routes all of the generator's output directly into the electric buss bars inside the main circuit breaker panel of your home. However, your electric meter, all other electric loads, and the utility grid are also connected to this same electric buss. Since most people have a limited understanding of how their electrical service operates, they will not recognize the need to turn off the circuit breakers to all larger appliances like electric stoves and air conditioners, which almost guarantees they will overload the

generator which is "back-feeding" their electrical panel through the dryer outlet.

They will also forget to switch off their service disconnect, guaranteeing the utility power will feed back into the generator as soon as the grid is re-energized. Every year there are hundreds of portable home generators that become fireworks displays in the backyard when the utility grid comes back on, not to mention the potential to also burn down the house. Since both the generator and the clothes dryer have "female" 240-volt receptacles, this requires both ends of this homemade cable to be "male," with electrically energized exposed blades that you could accidentally come in contact with prior to plug in.

Do not take the risk. Purchase a manual transfer switch with any 3-kW to 6-kW portable generator, and an automatic transfer switch for all larger pad-mounted generator installations.



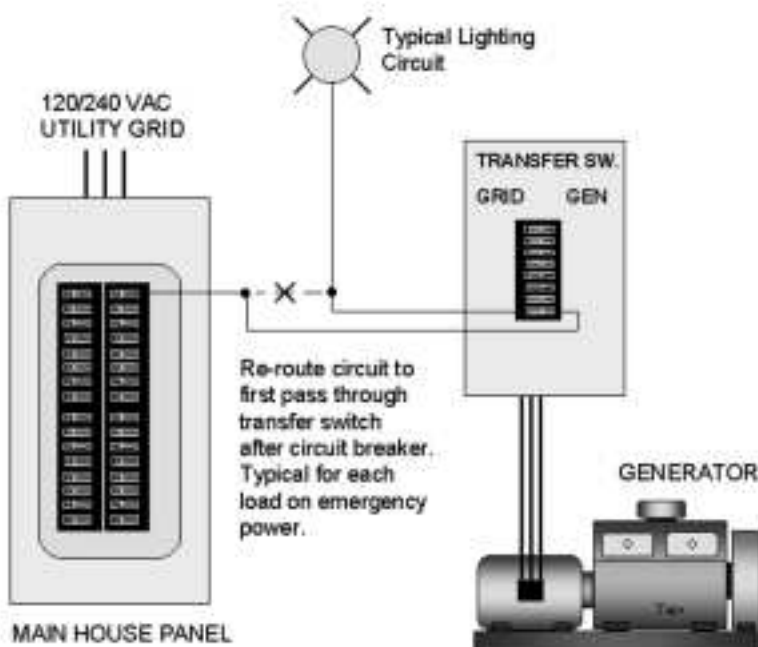
GenTran manual transfer switch with individual load controls

New generator technology

One of the main problems with using a generator today is all the new electronic and computer equipment we all own which require a very stable voltage source that is free of electrical line "noise." Older and lower-cost generators cannot always provide this clean electricity, since their supply voltage will keep changing as the generator's engine adjusts to meet the switching load demands. Appliances in the United States are designed to operate on 60-cycle pure sinewave 120-volt AC power.

If you could view this on an electronic scope, you would see the utility grid voltage rise smoothly up to a peak, then reverse to peak again in the opposite direction, 60 times every second, rising and falling smoothly like waves on a pond. The 120-volt measurement is the average of this constantly changing voltage wave form, and the maximum peak-to-peak voltage is actually closer to 169 volts.

Some lower-cost generators use voltage controls to increase their



Schematic wiring diagram with only power wiring shown. Grounding and neutral wiring also required. All wiring must be per National Electric code and all equipment must be UL labeled.

advertised peak load capacity by reducing this peak voltage as the load increases. You would still measure 120-volts AC with a volt meter when this happens, and most lights and small appliances would not notice the difference, but some types of motors may run slower, and almost all battery chargers will experience a significance loss in performance since these devices need the full peak voltage to operate properly.

Generator manufacturers have started to address these power quality issues by offering models that include a true sinewave inverter added to the generator's output circuit. These inverter generators or "I" models, provide grid quality sinewave output with a rock stable voltage throughout the full capacity range of the generator. Although this feature adds significantly to any generator's base price without increasing its total kW capacity, this generator feature is desirable if you are planning to charge a back-up battery bank or power electronically sensitive computer or audio video equipment.

Generator load estimating

As mentioned earlier, it is not practical to install a generator that can equal the capacity of the utility grid supplying your home. This is not even done for commercial or institutional back-up power systems, which have only critical loads powered by their generator. These large emergency generators are normally only used to power emergency lighting, phone and fire alarm systems, and the pumps and controls needed to keep the heating system functioning normally. These generators are rarely sized to also power large central air conditioning systems, except for hospital operating rooms, micro-electronic clean rooms, and critical computer rooms. Just like the large system designer, you need to decide what electrical loads are absolutely

necessary to remain operational in your home during an extended power outage, which will determine your generator size.

Most engine driven generators have a "stepped" linear relationship between their loading and their fuel consumption. Most lightly loaded generators will consume the same fuel from no load up to about 25 percent loading. Above this point, the fuel consumption will increase at the same percentage as the load up to about 75 percent of full load. Above this generator loading, the fuel consumption will increase at a higher rate than the load. The 50 to 75 percent load range appears to be the most fuel efficient operating range for most generators, and it should be clear that it is not fuel efficient to operate an 8-kW generator just to power one table lamp. This load-fuel relationship should be considered when selecting the loads that will be supplied by your generator, and when selecting the generator size matching this operating range.

Electrical loads

<u>Fixture/appliance</u>	<u>Run wattage</u>
Incandescent bulbs	Bulb wattage
Fluorescent lamps	Bulb wattage x 1.2
Kitchen Microwave	1,260
Toaster	1,055
Drip coffee maker	850
Dishwasher*	1,150
20 cu. ft. refrigerator*	700
19" color TV	75
50" projection screen TV	180
DSS satellite receiver	15
Stereo VCR	22
Stereo amplifier	75
CD player	5
Tape deck	6
Circular saw*	1,400
Deep well pump*	1,000
Heating hot water loop pump*	98
Aquarium pump, heater, and light	145
Desktop computer and monitor	210
Inkjet printer	17
Fax machine	20
Cordless phone	2
60-gallon hot water heater	4,500
Clothes washer*	500
Furnace blower fan*	700

Electrical loads that include a motor or compressor noted with an asterisk (*) will have a momentary startup in-rush of electrical current almost double the normal run time wattage shown in the table, which could easily exceed your generator's peak capacity. Double the run time wattage estimates shown for all motor loads to make sure your generator can handle this initial start-up surge. Also note that all fluorescent lights have a ballast load that is accounted for by using the indicated 1.2 multiplier.

Using the table of appliance wattage estimates, make two lists. Keep in mind that these are average values and you should verify the nameplate data on your own appliances if in doubt. Your first list will be the total wattage of all lights and appliances that must operate at the same time. Your second list will identify all larger electrical loads you may also like to supply, but are not required to operate while these more critical loads are on. This will help determine how many separately

switched circuits you will need on any transfer switch, since these loads must remain off until they can be operated when all other loads are off.

An example of these less critical electrical loads would be a clothes washer, an electric hot water heater, a small window air conditioner, or a dishwasher. Although these loads could easily require all of the output of a smaller generator, you may be able to heat up the water tank from the generator and operate a washer later at night when all other loads are turned off. Remember that a water heater and well pump are usually 240-volt loads, and will require different switching and wiring than your 120-volt loads.

Generator load balance

Most generator nameplate ratings are their maximum peak capacity, which must be de-rated if the loads are continuous or consist of many separate appliance motor loads that will be randomly starting and stopping. Be sure to take this into consideration when making your final generator selection. Also note that most back-up generator capacity ratings are based on a balanced loading of their dual leg 120/240-volt output. This means that each 120-volt side of any 240-volt generator output is designed to supply half of the total nameplate wattage. A 4-kW rated generator may only have 2-kW capacity supplying each of its two 120-volt circuits. If all of your connected loads are 120-volt, then these loads should be equally divided between these two separate branch receptacles. If all of your electrical loads are connected to the generator with a single two conductor extension cord, your generator may only be able to supply half of its nameplate rating through this single cord.

Most generator panels have multiple receptacles on separate "legs" of the generator's windings. Be sure to take advantage of these multiple out-

lets by using two or more extension cords to supply your loads which will help balance the generator's dual voltage output. I have noticed that some portable generators now include a 120/240-volt load switch on the generator's receptacle panel to do this load balancing for you. When you will not be powering any 240-volt loads, this switch will combine the separate generator windings so almost all of the nameplate rating capacity will be available to the dual 120-volt duplex outlets.

Larger generators have a two-pole 240-volt circuit breaker instead of a receptacle panel to allow hard wiring the generator's output directly to your home's electrical service panel. If you will be using this type of wiring connection, try to make sure the individual load circuit breakers are divided equally to each side of this dual pole circuit breaker. All 240-volt generators need a fairly balanced loading on each 120-volt output leg to achieve their nameplate rating.

Conclusions

The purpose for buying an emergency generator is to have electricity during an emergency. I know that may sound obvious, but every year I hear about the guy who ran out and bought the first generator he could find when a snow storm was forecast, only to find out days later that it would not run without gasoline. Gasoline stored in a container or fuel tank will go "stale" after a few months, and your local gas station will also most likely not have power when you are without power. This means your generator will only run a few hours on the gas remaining in its tank if you have not planned ahead.

In order for this to be a truly reliable emergency power system, you need to have the fuel on hand to operate your generator for several days. You should rotate your gasoline or diesel fuel every few months, and make sure it is stored in a safe place.

Useful websites

Diesel Generators

Tuban Industrial Products

www.eGens.com

Imperial Diesel

www.imperialdiesel.com

Gasoline/Propane Generators

Generac Power Systems

www.generac.com

Yamaha Generators

www.yamahagenerators.com

Honda Generators

www.generators-direct.com

Onan Generators

www.coloradostandby.com

Kohler Generators

www.kraftpower.com

Transfer Switches

and Accessories

Northern Tool and Equipment

www.northerntool.com

Reliance Controls

www.reliancecontrols.com

Northwest Power Tools

www.northwestpowertools.com

CVF Supply

www.cvfsupplycompany.com

Mayberry Sales & Service

www.mayberrys.com

Norwall power Systems

www.norwall.com

It is also much easier to store, rotate, carry, and refill the generator's tank from several smaller fuel storage containers than one large one. For example, my generator has a five-gallon fuel tank, so I keep four full five-gallon fuel storage containers on hand, but keep the generator's tank empty to avoid its fuel going bad which would require draining and re-filling before it could be operated.

Using the same size fuel storage container as the generator's tank capacity makes for smoother re-fill operations, especially when standing in the rain or snow. I use the oldest fuel first to fill other motorized yard equipment and rotate the numbered containers as they are refilled. You

should consider adding a fuel additive to all standby gasoline and diesel fuel storage containers to extend their shelf life, but this still only adds months, not years to their useful life.

Buying a propane or natural gas fueled generator will eliminate these problems since these fuels do not go stale. However, all generators need to be started and run once or twice each month to circulate their lubricants, drive off damaging moisture, and charge their starter batteries. Do not expect a generator that has been stored in the garage for over a year to start on the first pull, and don't expect it to run with two-year-old fuel in the tank.

Regular monthly testing and running your generator, annual oil and filter maintenance, and keeping insects and rodents from building nests in the air intake is an integral part of keeping your generator ready for an emergency.

WIRELESS DRIVEWAY ALARM



An alert will sound in your home or workshop anytime someone approaches the house. Never miss a visitor while your working on a project.

-Free Literature-
A complete line of wireless security equipment & weather products.

DAKOTA ALERT, INC.

Box 130, Elk Point, SD 57025
Ph: 605-356-2772 • www.dakotalert.com

Having a portable generator and the fuel to operate can be a real life saver during a week-long power outage, but having an automatic start generator and hard wired automatic transfer switch can be downright decadent.

(Jeff Yago's latest text titled, *Achieving Energy Independence - One Step At A Time*, provides a very good introduction to off-grid living and back-up generator power systems. It is available from the *Backwoods Home* bookstore or by calling 804-784-0063.) Δ

UTAH SHELTER SYSTEMS

Emergency Shelters
(nuclear, tornado, earthquake)
Call us for all your sheltering needs
Blast doors, blast valves,
chem/bio filtration systems



Utah Shelter Systems
PO Box 638, Heber, UT 84032
435-657-2641

<http://www.disastershelters.net>

PowerPod™ corporation

Box 321, Placerville, CO 81439

- Modular integrated solar energy systems

Use for:

- lighting
- communications
- water pumping

- small & large PowerPods with inverters up to 4000 watts AC
- small units are easily transported
- energy efficient lights & appliances also available
- Made in USA pat.#426,973

Sundance Solar Designs, our sister company, offers complete renewable energy system design/consult, sales & installation services. Home & Ranch. Solar, wind & hydro.

www.powerpod.com
1 888 786-3374

DISTANCE EDUCATION

The Homeschooler's "Click"

Now you can get the independence of homeschooling, the camaraderie of a traditional high school, and over 35 full-credit courses from **Keystone National High School**, an independent accredited study specialist for over 25 years. Choose between **correspondence courses** and the new **eSchool**, with its virtual Home Room, bulletin boards, chats, and more. **It's easier than ever to achieve academic success at home.**

**Call 1-800-255-4937,
Dept. 131 or visit
www.keystonehighschool.com**





**KEYSTONE
National High School**

420 W. 5th Street, Bloomsburg, PA 17815-1564
A division of KLC Distance Learning

Growing & storing herbs

By Tom R. Kovach

Herbs are chiefly grown for culinary purposes in seasoning foods, but their medicinal properties have also been used for centuries. They are not that difficult to grow. Here are some helpful tips:

Soil properties

The vast majority of herbs demand a well drained soil with a pH range of 6.0 to 7.5 for successful growth. (A measure of acidity and alkalinity of a solution that is a number on a scale on which a value of 7 represents neutrality and lower numbers indicate increasing acidity and higher numbers increasing alkalinity. Each unit of change represents a tenfold change in acidity or alkalinity). Outside, avoid planting in heavy clay soils as well as areas which are notorious for standing water. Containers used for growing herbs should always have holes in the bottom for proper drainage. Also, avoid using soils which have a high nutrient content. These rich soils may actually prove to be detrimental to the plant's development by promoting rapid, lush growth which is weak in volatile oils, the herb's important characteristic.

Light

Herbs, unless noted shade lovers, require at least 6 to 8 hours of direct sunlight in order to grow well. The more intense the light, the better the oils will develop within the glands of foliage and stems, creating stronger fragrances and seasonings. A southern or western exposure will meet the needs of most herbs, although some may do well in a very bright east-facing location. Inside, it is crucial to give herbs the best light available.

During winter, when days are shorter and typically darker, fluorescent lights may be necessary to maintain healthy plants. Ten to twelve hours of artificial light daily is adequate for most indoor grown herbs. Inadequate light will result in spindly, thin growth.

Purchasing herbs

Plants can be obtained from local garden centers and nurseries beginning in early spring. Generally, these sources offer the more common herbs in six-packs or single pots. Speciality mail order catalogues offer more varieties of unusual herbs, but research your choices thoroughly. Northern gardeners have to be content with growing some herbs as annuals which would otherwise be grown as perennials in warmer regions of the country. Lemon verbena and sage are two such examples.



Propagation

It is important to check the specific propagation and planting requirements of each herb because some methods work better with certain herbs than others.

Typically, the herbs grown as annuals are best propagated by seeds or softwood cuttings. Other methods are usually used for hardy perennial herbs. For example, lovage and

chives are successfully propagated by division in the spring.

Seeds can be started indoors under fluorescent lights during the late winter months. Lights should be set for 14 to 16 hours daily, placed approximately four to six inches above the seedlings, and raised as they grow.

Herbs should be transplanted outside once frost danger has passed and the soil has warmed and is firm enough to work. Space seedlings with the mature plant size in mind. Crowded conditions will result in tall, weak plants.

Watering

Garden bed plantings should be kept slightly moist between waterings. Water thoroughly by soaking the soil to a depth of approximately 6 to 8 inches to ensure that the root zone is receiving adequate moisture. Outdoors, container grown herbs usually dry out faster than those in beds, so they must be watered more frequently. Inside, water thoroughly when the soil feels dry a half inch or so below the surface, depending on pot size. Never allow the plants to wilt between waterings, but avoid constant soggy soil conditions. This is the cause of root rots which are the most common problem of herbs grown indoors, especially during dark winter months.

Fertilizer

Fertilize sparingly; herbs are not heavy feeders. In most cases, garden beds can benefit from using a 5-10-5 commercial fertilizer at the rate of 3 ounces per every 10 feet of row. Apply once or twice throughout the growing season. Use a liquid fertilizer at half the label-recommended strength once every 4 to 6 weeks or

so for indoor plants and every 1 to 4 weeks for herbs in containers indoors.

Mulching

Mulching materials such as straw, marsh hay, and leaves provide good winter protection for hardy perennial herbs. Depending on the size of the plant, a mulch 2 to 5 inches thick will keep the temperatures around the plant more constant during late fall and early spring, keeping winter damage to a minimum. Mulching can also be beneficial during hot, dry periods of the summer by helping maintain moisture in the soil.

Problems

In general, herbs do not have serious problems with insect pests and diseases. If using pesticides, choose only those insecticides and fungicides which are labeled for use on herbs. Aphids and other insects can be somewhat controlled with forceful sprays of water or with insecticidal soaps if they are a constant problem. The most common problem with herbs, particularly those grown indoors, is root rot resulting from over watering and poor light conditions. The best precaution is to provide good soil drainage, bright light, and air circulation.

Harvesting

Culinary herbs can be harvested throughout the growing season by snipping sprigs and leaves as they are needed. Many will contain the best flavor if harvested just before the flowers are beginning to open. By making the cut a few inches down the stem and just above a set of leaves, new growth will constantly be encouraged and a bushier plant will result. This is especially important with annual herbs such as basil which would otherwise become quite woody and less productive if it were left to seed.

Herbs grown for their flowers are harvested by picking a few stems or

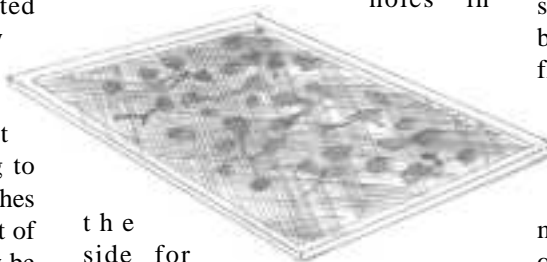
whole bunches just before the flowers are fully opened. And those grown for seed, such as caraway, are best collected late in the season when the seed is ripe.

Regardless of the method used, the time of day is very important. Mid-morning hours are best to harvest as this is when oil content is highest. This is usually just after the dew has dried and before the heat of the day begins.

Once picked, herbs should be gathered quickly and kept out of bright light. Washing the herbs is not required but may be necessary if there is a lot of debris on the foliage. If this is the case, wash gently with warm water and pat dry or use a hair dryer on a low setting. Otherwise, excess water will slow the drying process.

Methods of preserving

Air drying: Gather 4 or 5 stems and tie the ends together. Hang them upside down in a dark, warm, well ventilated room. Label, using small tags, as dried herbs will look different than fresh and mix-ups can easily occur. The foliage should dry in 7 to 14 days depending on conditions. This method also works well for drying seed pods and collecting seeds. To collect seeds, simply place a paper bag around the hanging herb with holes in



the side for air circulation.

As the drying process begins, the pods will open, the seeds will drop out and collect on the bottom of the bag.

Air drying can also be done under the same conditions using screen racks. Make sure the herbs are spread

out only one layer deep. A cookie sheet or solid surface will not work as well, as only one surface will dry properly.

Oven drying: Again, using a screen type tray, spread the herbs evenly and set the oven no higher than 100°F or at its lowest temperature. Keep the door open and check every 30 seconds. The herbs will dry very quickly, within a minute to a minute and half.

Microwave: Microwave ovens provide the fastest means of drying herbs. But because of different wattages and models, specific settings would best be determined by experimenting with your own microwave. Start with using 15 second intervals and keep checking the herbs until they are thoroughly dried.

Freezing: Freeze small quantities of herbs at a time. A few leaves or sprigs placed in a labeled plastic bag works well. The material can also be chopped up and packed into ice cube tray compartments. Top it off with a little water and freeze. Avoid freezing large quantities as they can't be refrozen once thawed. Properly frozen herbs should be used within a year.

Storage: Once herbs are properly dried, strip the leaves from the stems. Do not keep stems as they tend to retain moisture long after the leaves have dried and may become moldy in storage. Store leaves whole, if possible, as the larger pieces have better flavor retention. However, if space is limited, crumbling or grinding the herbs can work; you'll just have to use more. Store in an airtight container. Herbs stored using these methods can usually last up to a year or a year and a half. Keep stored herbs away from bright light and heat sources and periodically check for any moisture buildup within the container. Δ

Want a good garden?

Go to:

www.backwoodshome.com

Making wild nuts

into nut oil, nut meal, and nut butter

By Rev. J.D. Hooker

Come the last days of August, I start spending even more time out in the woods than usual, because this is when squirrel season opens up around here. The Good Lord never provided any more succulent table-fare for a man to enjoy than the meat from these tasty little creatures.

But, there's more to this time in the woods than that. Those tall hickory, black walnut, and pecan trees that feed those tiny squirrels also offer plenty of tasty and highly nutritious food for us humans. I always take along an old burlap feed sack on each hunt to stuff with walnuts and hickory nuts.

When ripe, the outer hulls of hickory nuts are naturally segmented and readily pull off in four separate pieces. The outer hulls of the walnuts come in a single solid piece, but are soft and easily mashed under foot. Unless you don't mind running around with deep-brown stained hands, I recommend wearing gloves as you remove the walnuts from their hulls.

We've found that just about every type of nut will keep for a long time inside of its uncracked hull, yet once opened, most go rancid, turn moldy, or develop a stale taste quickly. We only crack open roughly the quantity we'll be needing at one time, leaving the rest in the shell until needed.

The best method we've found for removing hickory nuts and black walnuts from their shells is to stand the nut on end and deliver a sharp rap with a hammer. An awl, ice-pick, crochets hook, knitting needle, or a regular nut-pick can be used to remove the meats. For us, this is usually an

evening project. My wife puts a movie in the VCR for the kids and grandkids to watch while we work.

Of course the largest pieces you manage to pick out can be used up according to any use you might have for regular store-bought walnuts or pecans. You should try dipping some in honey, sprinkling with a little salt, and roasting them in a hot oven. Or, try stirring together ½ cup of melted butter, 1 cup of corn syrup, 1 cup of sugar, ¼ tsp. of salt, ½ cup of dark rum, and 4 beaten eggs. Pour this into an unbaked pie shell, top with 1½ of hickory or black walnuts mix of the two, and bake for 55 to 60 minutes at 325 degrees. This is even better than pecan pie.

Eaten straight out of their shells, used in cookies and baking, oven roasted (with or without a dusting of salt), or enjoyed in any other manner, nuts pack a mighty big nutritional wallop inside their small packages. Over the years we've made a point of learning about several other valuable uses for these free forest gleanings.

With a few exceptions (chestnuts, hazelnuts, and a few others are nearly fat-free, and this won't work with them) an exceptional cholesterol-free oil that's ideal for baking and frying is pretty simple to extract from nuts.

Start by simply using a hammer or running them through a food chopper to coarsely crush a gallon of nut meats. Place these chopped nuts into a large pot of boiling water, and cook at a low boil for 5 or 6 hours (add more water as needed). Set aside in a cool place for several hours or overnight.

Once thoroughly cooled, the layer of oil and chopped nuts floating on top of the water is easily spooned off.

Strain through a couple layers of cheesecloth and reserve the oil for any purpose where you might normally employ any type of vegetable or cooking oil.

Don't discard the remnants of the crushed nuts you've strained out. Lightly toasted in the oven, and run through a grain mill, they'll provide you with an exceptional substitute for corn meal. Very finely ground, this can be substituted for up to 50 percent of the white flour called for in any recipe. Aside from using this meal in muffins, breads, cakes, pie-crusts, and so forth, this "nut meal" makes the tastiest crispy coating I've ever sunk a tooth into, when my wife fries up chicken, fish, or similar fare.

We also use a method very similar to this oil extraction process to produce our grandchildren's favorite food staple, nut butter.

The nut meats are spread on cookie sheets and toasted for 20 to 30 minutes in a 450-degree oven. Once cooled, they're fed through our hand-cranked grain mill and ground to a floury consistency. This "nut flour" is then boiled following the same procedure used for oil extraction, and set aside to cool. Once cooled and left to set for several hours or overnight, the residue floating on top of the water is again spooned off, but rather than straining to remove the oil, we blend the stuff together. Our grandkids especially like "nut-butter" and homemade jelly sandwiches. If you or your kids like peanut butter, you're really going to love hickory, pecan, almond, or walnut butter. Don't just take my word on that though, try this for yourself. Δ

Cornmeal cooking

By Gaynya Tallmadge

Once someone asked me how I could use up a 25 pound bag of cornmeal. Well, honey it ain't hard.

I won't tell you if you should use germinated, degerminated, or home-ground. It all tastes good, but if you happen to have a little bit of dried sweet corn laying around somewhere and the means and energy to grind it, every recipe here becomes gourmet.

Any good cookbook will tell you how to make the standards—cornbread, pone, mush, or hushpuppies. Here are some of my cornbread favorites.

Mush biscuits:

1 qt. boiling water
1 cup cornmeal
1 cake yeast
1 cup potato water
1 cup lard or shortening
1 cup sugar
½ tsp. salt
flour

Add cornmeal to boiling water until thickened. Dissolve yeast in warm potato water. Mix all ingredients to make a soft sponge. Stir in enough flour to make a stiff sough. Set to rise in a warm place. When double in bulk, roll out and cut as biscuits. Bake in a preheated 350° oven until nice and brown.

Cornmeal berry cake:

1⅓ cups cornmeal
⅔ cup flour
½ tsp. salt
1 tsp. baking powder
¾ cup butter
1½ cups sugar
4 eggs
1 tsp. vanilla
½ cup buttermilk or soured milk
1 cup fresh berries

Preheat oven to 350° degrees. Grease a 9" round cake pan. Sift together dry ingredients. Cream sugar and butter, beat in eggs and vanilla. Add buttermilk and dry ingredients alternately, stirring well. Fold in berries. Bake until a knife comes out clean. Berries set better if lightly floured before adding and strawberries should be sliced.

Cornmeal cookies:

½ cup butter
⅔ cup sugar
2 eggs
1 tsp. vanilla
⅔ cup cornmeal
1 tsp. baking powder
½ tsp. salt
1 cup flour

Cream butter and sugar. Mix in eggs and vanilla. Combine dry ingredients, and stir in butter mixture. Bake in preheated oven for 10 minutes or until bottoms are brown. If you wish, you may add raisins, nuts, or try various flavorings.

Cornmeal gingerbread:

1 cup flour
1 cup cornmeal
½ tsp. salt
1 tsp. baking soda
2 tsp. ginger
½ cup butter
½ cup brown sugar
2 eggs
½ cup molasses
¾ cup hot water

Combine dry ingredients. In separate bowl cream butter, sugar, and eggs. Stir in molasses. Mix in ½ of dry mixture. Stir in ½ hot water until smooth. Repeat. Bake in preheated 350° oven 45 minutes or until center springs back when touched. Delicious alone or with lemon sauce.

Cush-cush:

4 Tbsp. bacon drippings
1 chopped onion
2 cups crumbled cornbread
1 cup crumbled biscuit
1 tsp. sage
salt and pepper
2 beaten eggs
milk

Heat bacon drippings in iron skillet, add onion and cook til tender. Add cornbread, biscuit, and seasonings. Cook stirring until browned. Stir in eggs and milk until a mush like consistency is reached. Bake in preheated 350° oven for 20 minutes. Serve hot with syrup or as a side dish to eggs or meat.

Cornmeal pie:

1½ cups brown sugar
½ stick butter (softened)
2 eggs
1 tsp. vanilla
3 Tbsp. cornmeal
1 unbaked pie shell

Mix all ingredients. Pour into an unbaked pie shell. Bake in oven preheated to 350° for 45 minutes or until a knife comes out clean. If you like you can triple the recipe and bake on a pastry lined cookie sheet.

Spiced cornmeal crisps:

½ cup boiling water
½ cup cornmeal
1 Tbsp. cold butter
1 tsp. chili powder
½ tsp. garlic powder
1 Tbls. romano cheese

Combine cornmeal, cheese, and spices. Add butter. Using a fork or pastry cutter, work until it resembles fine crumbs. Add boiling water and stir well. Place dough in a sandwich

bag with a ¼" cut in one corner. Squeeze into 6" strips on a lightly greased cookie sheet. Leave a little space between. Pop into a preheated 400° oven for 10 minutes.

Greens with cornbread dumplings:

2 pounds greens
2½ qts. water
1 onion quartered
1 pound bacon or ham
2 tsp. sugar
1½ cups cornmeal
¼ cup flour
1 cup boiling water

Clean greens. Bring 2½ qts. water to boil, add bacon and onion. Reduce heat, cook 20 min. Add greens, salt, pepper, and 1 tsp. sugar. Cook until tender.

Combine cornmeal, flour, salt, and remaining sugar in a bowl. Add the boiling water slowly while stirring until a stiff dough is made. Break walnut sized pieces into the simmering greens. Cover and simmer 30 minutes.

Cornbread salad:

1 8" pan of baked cornbread
4 tomatoes, chopped
1 green pepper, chopped
1 onion, chopped
10 slices crumbled bacon
½ cup chopped sweet pickle
1 cup mayonnaise
⅓ cup sweet pickle juice

Combine vegetables, bacon, and pickles. Mix together mayonnaise and pickle juice. Crumble cornbread.

Layer half of cornbread, vegetable mixture, mayonnaise in large bowl. Repeat. Cover bowl and chill well.

Now for a few hints: If you didn't get around to making mush last night, just crumble and fry leftover cornbread. The taste is the same and you don't have to cut it to take a bite. Try cornbread and milk as a snack. Simply crumble in a glass, add milk or buttermilk, and a little sugar. Some

folks add chopped onion. If you love cream gravy and biscuits, try your favorite gravy on cornbread. It's a treat not to be missed.

As a beauty agent, cornmeal is unsurpassed as an exfoliate. Fill the palm of your hand with meal, add warm water to make a paste and go to work on you face, rough heels, or elbows.

I hope this inspires you to add nutritious, wholesome cornmeal to your diet more often. Δ

**MONTANA, WYOMING
& NEW MEXICO
LAND**

20 ACRES.
Average Monthly Pmt. \$285.
Owner Financing. Guaranteed Access. Insured Title.
No Time Limit Transfer Guarantee.

Free Information: 1-800-682-8088

Rocky Mountain Timberlands
1315 East Main, Dept BW, P.O. Box 1153
Bozeman, MT 59711-1153 • 406-588-8088
New Mexico Office: 505-472-3318

MINI PVC GREENHOUSE KIT
WITH TOP SLIDING VENT

Top quality Greenhouse film
4 mil thick with
Remay cover.

Season extended by at least 4 weeks.
\$95.00 + shipping & handling

Call after 5 pm
(207) 634-2488
some assembly required.

see our web page - www.herbalponics.com

SUN-MAR
Composting Toilets

NO SEPTIC • NO ODOR
23 Models, Electric & Non-Electric

CALL FOR
FREE
CATALOG



for: Cottages, Cabins, Home, Workshops, Boats

1-800-461-2461
SUN-MAR CORP. 880 Main St., Tonawanda, NY 14150

The informed juror

How an informed jury helps safeguard liberty

By Dr. Gary F. Arnet

“**Y**ou are hereby summoned to appear for jury trial service. Failure to respond will subject you to punishment for contempt, including a \$1,000 fine, imprisonment for five days, or both.”

I understand that jury duty is my civic responsibility, but still when I got this jury duty notice my first thought was, “What a waste of time. How can I get out of this?” The thought of sitting all day in the jury box while lawyers argued back and forth manipulating facts in order to win their case just did not appeal to me. “There must be an excuse I can use to get out of this,” I thought.

Then I thought of several newspaper articles I had recently read. In one, a man in our city was sentenced to 42 years to life in prison under California’s “three-strikes” law, a law passed by voters to imprison violent criminals for life. Was this man’s third strike murder, rape, or assault? No, it was stealing a pair of tennis shoes. “That’s not right,” I thought, “Nor, is it the intent of the law.”

In another case, our local district attorney was quoted in the newspaper as saying he had asked a suspect to voluntarily come in to his office for questioning or else “We will kick your door in and drag you into the

street.” Wait a minute. If the crime this person is accused of committing is so minor that he can drive himself to the office, why can’t the district attorney come to his house and knock on the door? Why would they have to drag him into the street? “That

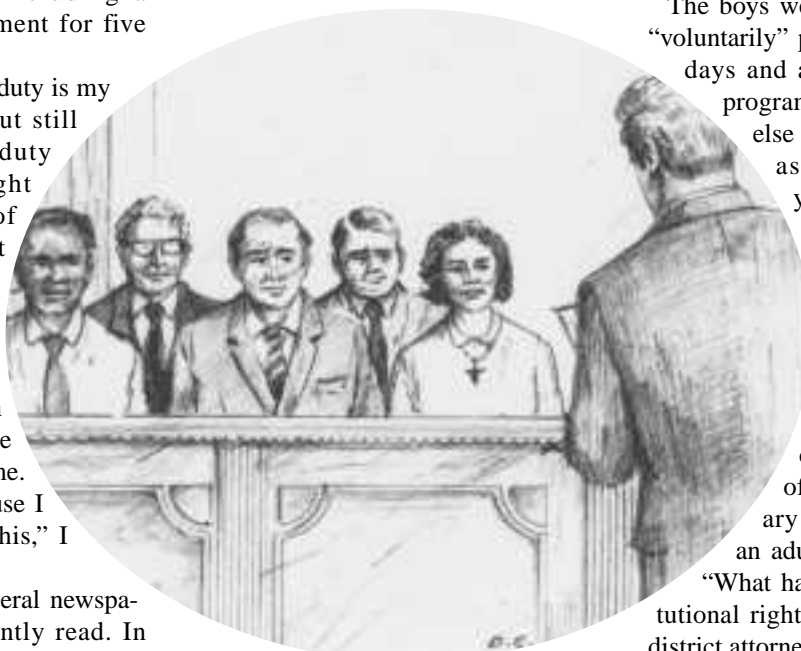
passed out. There is no question the boys are at fault and, if guilty, the boys do deserve punishment. Also, there is no question that her actions caused her own problems. It was the actions of the district attorney that got my attention, however.

The boys were given the choice to “voluntarily” plead guilty within five days and attend a “diversionary program” without jail time or else they would be charged as adults, facing eight years in prison and being required to register as sex offenders for the rest of their lives. Not much of a choice.

“Wait a minute,” I thought, “Either the crime they are accused of warrants a diversionary program or prison as an adult. Which is it”? Also, “What happened to their constitutional right to a fair trial?” Is the district attorney worried he cannot get a conviction if the jurors consider the girl’s actions that night.

Now I knew why I needed to comply with the summons for jury duty. I needed to be there to determine innocence or guilt, but even more so I needed to be there to make sure the defendant received a fair trial and was not “railroaded” by the district attorney.

This was not normal thinking for me. I am an average American citizen who supports my government and police and who is fed up with increasing crime. I believe the police



sounds like an abuse of power,” I thought.

Then I read about a local 16-year-old high school girl at a large party of high school friends. She apparently took off her clothes, ran around naked, yelled “*What’s a girl have to do to get sex around here,*” and then started having sex with multiple young boys at the party. Later, she began drinking liquor she brought to the party, continued with other boys, and passed out from the alcohol. Several boys under age 18 were charged with sexually assaulting her after she

and courts are trying to protect us from criminals. However, more and more, I am disturbed by the loss of our freedoms and our rights, and their attempt to win convictions at all costs.

My “day in court”

On the day of jury duty, I was one of more than 100 people called as prospective jurors for a particular trial. All had taken off work or stopped their daily lives in order to do their civic responsibility. Either that, or the threat of five days in jail for not showing up got their attention. I figured it must be an important trial to need so many prospective jurors.

When we were in the courtroom, I could see a clean-cut young man at the defendant’s table. The judge began. “The defendant is accused of spray painting the front door of a business. The charge is vandalism under \$400, a misdemeanor.”

My first thought was, “What! You took all of us away from our work and lives for this?” My next was, “Wait a minute. This is so minor that I’m sure he could have plea-bargained this charge away if he was guilty. I’ll bet the guy is innocent and he wants his day in court.” Now I really wanted to be on the jury.

The judge continued. “As jurors, you are required to enforce the law even if you disagree with it. You must use the evidence presented and what you are told the law is as you deliberate this case. You cannot consider anything else. You cannot judge based on your beliefs about the law being right or wrong.”

This did not sound right to me. I always believed that a juror has the right and responsibility to use their conscience in making a decision. The instructions given by the judge seemed like a way to manipulate outcome of the trial.

Then I remembered another case. Bryan Epis was charged in Sacramento Federal Court with a

four-count federal indictment for “conspiring to manufacture 1000 marijuana plants,” a crime which carries a mandatory 10-year prison sentence.

While a federal crime, he was co-founder of Medical Marijuana Caregivers and was operating legally in accordance with California’s medical marijuana law established in 1996 by Proposition 215. Under this law, he was allowed to provide marijuana to seriously ill patients who had a doctor’s prescription.

Whether or not one believes that the law or the use of marijuana is right, it was the actions of the federal prosecutors and the court that bothered me. The first federal attorney involved in this case offered Mr. Epis four months of house arrest in exchange for a guilty plea without a trial. Wanting the trial he is guaranteed by the *Constitution*, he refused.

A new federal attorney took over the case and offered him four years in prison in exchange for a guilty plea. When Mr. Epis again refused, the federal prosecutor filed charges that carried a mandatory 10-year prison term.

Now I was really confused. Was the crime so minor that four months of house arrest is appropriate, or was it so serious that he deserves 10 years in prison? Or, is the government trying to deny him his right to a trial by threatening a long prison term if he does not plead guilty “voluntarily?” “No problem, he will receive a fair trial and the jurors will decide,” I thought.

Suppressing evidence

Unfortunately, that is not how it works anymore. The information the jury is told is severely restricted. They are given just what government (the judge and prosecutors) decide is appropriate, rather than all the facts needed to make an informed decision.

In this case, jurors were not allowed to hear about California medical mar-

ijuana laws or the reasons he grew the marijuana. The prosecutor even sought a gag order so the case would not be reported in the newspaper. “If the jurors see that there is a mandatory 10-year sentence, I don’t see how the government can receive a fair trial,” argued the federal prosecutor.

“Wait a minute,” I thought, “Isn’t it the defendant who has a right to a fair trial? Where does it say the government has such a right?”

Bryan Epis was convicted and sentenced to the mandatory 10 years in prison. A juror said afterwards that he would not have convicted him if he had known the sentence. So much for a defendant receiving a fair trial.

Today, there are many obstacles to a defendant receiving a fair trial, including bad laws, inappropriate application of laws, and manipulating the information juries can hear.

Bad laws come from many directions. Elected legislators at all levels of our government have swamped us with a tremendous number of laws, many valid and many not. Even good laws are applied inappropriately, as in the case of the man sentenced to 42 to life for stealing a pair of tennis shoes. It was a good law intended to remove violent criminals from society, but wrongly applied to an act of petty theft.

Unelected bureaucrats increasingly have the power to write and enforce regulations that have the effect and consequences of law, often without the right to a trial. Federal and state tax, environmental protection, and occupational safety agencies are all prime examples of such regulatory bodies.

Even the U.S. *Constitution* is constantly under attack. Unbelievably, in a case that is certain to be appealed to the U.S. Supreme Court, the Federal Appeals Court in San Francisco recently ruled that Americans do not have the right to own firearms as individuals, only the state-run militia can own guns. This is a surprising deci-

sion even for this notoriously liberal court.

Prosecutors also charge defendants with as many laws as they can find that remotely apply in order to overwhelm the defendant, often bending the laws to try to make them fit. They want a jury to think that with so many charges, the defendant must be guilty of something.

A children's dentist in Pasadena, California, was unfortunate enough to have a patient die in her dental office during treatment, despite following standard care. She was arrested on felony child endangerment, her own children were taken from her, and she was charged with violating 81 laws by the district attorney. At trial, all 81 charges were either dropped or she was found not guilty. Some of the charges were clearly lies and there was no reason she should have been charged in the first place. Jurors stated the trial was a huge waste of taxpayer money. The district attorney and the State Board of Dental Examiners ruined her life without having a case.

Trials without juries

The *Sixth Amendment* to the *Constitution of the United States* gives the accused in criminal prosecutions the right to "a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed." More and more, however, individuals are denied a trial at all.

In family court and cases by the IRS, jury trials are not allowed. Federal law and some state laws deny a trial in cases where the sentence that can be imposed is six months or less. They can charge a defendant with multiple crimes, each with a 6-month penalty that can run consecutively. Therefore, in an end-run around the *Sixth Amendment*, an accused can be sentenced to years in prison without a jury trial. The government tries to avoid a trial whenever

possible, knowing that many cases would be thrown out if the juries realized how the laws were being applied.

Stacking juries

Our jury system is certainly not impartial. There are problems with how the jury is selected and the instructions they are given.

"Failure to respond will subject you to punishment for contempt, including \$1,000 fine, imprisonment for five days, of both," was the statement that made me show up for jury duty. I wondered how many individuals don't even bother to respond to the summons for jury duty. I asked the court clerk, and, while avoiding directly answering the question, he said, "We send them a summons to see the judge, and if they ignore that a warrant is issued for their arrest." Forcing people to serve on juries is not a way to find impartial jurors.

Of the 100 or so of us summoned for the "graffiti trial," 16 names were randomly called. The judge informed them they were required to follow what they were told the law was, regardless of whether they agreed with it.

They were first questioned regarding whether they could be present the dates of the trial and a number were excused due to schedule conflicts. Sometimes, potential jurors are excused due to the length of the trial being a financial hardship. Often, these will be self-employed or other hard-working individuals who are not paid by their employers while they are on jury duty. This leaves government employees, welfare recipients, retired individuals, some workers of large corporations, and others with "time on their hands" as the main source of jurors.

The judge then excused some jurors because they had heard about the case or knew someone involved in the case. As potential jurors were excused, someone else from the

group of 100 would randomly be called to fill their spot.

Next, both the prosecution and defense asked questions to each juror. They both have "peremptory challenges" in which they can remove a potential juror for no reason. This is where they "stack the deck" in their favor by trying to include those who may be sympathetic to their case while removing those who may not. Lawyers also use peremptory challenges to try to adjust the racial and gender make-up of the jury to favor their side.

One young man looked baffled and embarrassed as he was excused without an explanation. While no reason was given, I noted that he was an engineering student. Lawyers typically don't want engineers or others who are too analytical on a jury since they may think the case out rationally. Jurors with education, strong convictions, and knowledge are routinely excluded from juries. Defense lawyers I have spoken with said that prosecutors try to have a jury of impressionable people who have about a seventh grade education and who won't think about the case on their own. They want to be able to easily persuade them.

The problem with juries doesn't end with their selection. The judge and prosecutor control the testimony and the instructions that jurors are allowed to hear. The "whole truth and nothing but the truth" is not heard by the jury, only the information the judge decides should be heard. The judge determines the evidence that is admissible or inadmissible, the importance to be given to any evidence, and then requires jurors to consider only this information.

Many jurors have a problem with this. They want to be told the whole truth and then be allowed to decide the case. How can you judge the case unless you know all the facts?

Twelve jurors were finally selected for my case. Unfortunately, I was one

of the many jurors not selected or even questioned. I left not knowing if this man was found innocent or guilty, but knowing that I needed to learn more about the rights of jurors.

What can a juror do?

Since it is pretty clear that it is hard, if not impossible, for a defendant to receive a fair trial today, what can a juror do? We all want criminals off the streets, but jurors are the only people who can make sure the defendant receives a fair trial.

The following is not something jurors will be told or something that the court wants them to know, but it has been so ever since the common law jury system was established almost 800 years ago.

On June 15, 1215, England's King John signed the *Magna Carta* (Great Charter) establishing liberties and rights of the population. Among other things, this established the principle of the right to a jury trial and the right and duty of the jurors to determine and judge the facts, to judge the justice of the law, and to declare the accused innocent. The intent of powers given to the jury was to protect citizens in case the government became too powerful and established laws violating the rights of the people.

The *Magna Carta* later became the basis of our liberties and *Constitution*. America's founding fathers also worried that the government they were creating could become powerful and corrupt, threatening the rights and liberties of Americans.

In the *Constitution* and the *Bill of Rights*, they provided the right to a trial by a jury of one's peers as a method to protect citizens from the power of an over-zealous government. A jury can refuse to convict a defendant who has clearly violated the letter of the law if they feel the law is unjust or unconstitutional, essentially vetoing the effect of the law.

In early America, jurors were told of this right and writings of our founding fathers show this was their intent. John Adams stated in 1771 "It is not only...[the juror's] right, but his duty ... to find the verdict according to his own best understanding, judgment, and conscience, though in direct opposition to the direction of the court."

In 1789, future President Thomas Jefferson stated, "I consider trial by jury as the only anchor yet devised by man by which a government can be held to the principles of its constitution."

Things changed as time went by. A Supreme Court ruling in 1895 found that judges were not at fault if they failed to remind jurors of this right. After that, judges not only stopped telling jurors they can judge the law, they now falsely tell jurors their only job is to decide if the evidence is sufficient to find the accused guilty. They are told they must do this even if they disagree with the law. Defense attorneys can be charged with contempt of court if they inform jurors that they may acquit if they feel the law is unconstitutional, unjust, or applied unfairly.

Jurors' real responsibilities

Throughout the history of America, juries have protected our freedoms by refusing to find an accused guilty of a law they felt was wrong. By refusing to convict an accused, they essentially have vetoed bad laws.

As early as 1735, a printer named John Peter Zenger was accused of seditious libel for publishing an article critical of colonial rule in violation of a law requiring government approval of anything critical of the government. Mr. Zenger admitted to publishing the article, stating that the facts justified publication. The judge stated that truth was no defense for violation of the law and the jury could not consider the truth.

Disregarding the judge's instructions, the jury found Mr. Zenger not guilty.

When enough juries acquit defendants that have clearly violated a law, the government eventually stops trying to enforce the law. The Salem witch trials in 1693 were stopped after 50 defendants in a row were acquitted. Before the Civil War, Northern juries refused to convict individuals accused of assisting escaped slaves in violation of the *Fugitive Slave Act*, effectively stopping the law. During Prohibition in the 1930s, convictions of bootleggers and speakeasy owners became rare as jurors refused to convict the accused, despite the *18th Amendment* and the *Volsstead Act*. Essentially, they vetoed the law and prosecutors eventually stopped bringing cases to trial. Subsequently, the law was overturned.

Over the years, most of these jurors probably just voted their conscience, not even realizing they had a legal right to judge the law. Many had been told by the judge to only deliberate on the facts presented and not question the fairness of the law.

Each juror has the power to affect change. There is nothing that requires a jury to reach a unanimous verdict. Under criminal law, only one juror must find the accused not guilty for him to be not convicted. When a jury decides to acquit a defendant, the decision is final and cannot be overturned. The judge cannot harass or punish jurors for voting their conscience and they may be asked, but not forced, to explain their verdicts.

If you are called for jury duty, it is an opportunity to protect the rights of the accused and, by doing so, your own rights and freedoms. Most of the time the law will probably be constitutional and, hopefully, applied justly. What can a juror do if it is not?

First of all, understand that nothing in the *Constitution* or Supreme Court decisions requires a juror to take an oath to follow the law as explained by the judge. As a juror, when you in

Grow safe, natural, chemical free food with the ultimate gardening tool.

A rugged, low cost Farm Wholesale Greenhouse

- PVC-clad steel frame for strength & durability
- Unique corrugated plastic cover reduces heat loss
- Soft diffused light, ideal for robust plant growth
- Built-in bench frames maximize growing area
- Easy-to-assemble, pre-cut frame and fittings
- Ships UPS or LTL, anywhere in the USA & Canada

Buy factory direct and save

Farm Wholesale Greenhouses

The safest food grows in your garden!

Free Catalog & Sample 1-800-825-1925

3740 BW Brooklake Rd. NE • Salem, OR 97303

www.farmwholesale.com

Make the best use of your land. Increase your food production with succession planting and crop rotations.

The new Doublewide Gold provides a flexible floor plan to maximize your growing area. Available in many sizes, this model features double-deck, PVC-clad, steel bench frames that let you grow hundreds of plants.

Build from kits or DIY with our covering.

Rated Best in the World
By 2 Consumer Magazines!

The Country Living Grain Mill

A masterwork of simplicity & ruggedness

- * Industrial grade sealed bearings
- * Perfect for hand milling or motorization
- * Balanced industrial flywheel

New! Power Bar Extension Handle & Corn and Bean Auger

Made in the U.S.A. LIFETIME WARRANTY

Country Living Products
14727 Sisk Ave. NW
Shawano, WI 54226

For Free Information Pack
Call: (360) 652-0671

Our family serving yours for over 30 years
www.countrylivinggrainmills.com

ELIMINATE ALL MORTGAGE & CREDIT CARD DEBTS, ELIMINATE ALL LAND PROPERTY TAXES, LEGALLY, COMPLETELY, PERMANENTLY.

DIVORCE THE IRS FROM YOUR LIFE. DRIVE WITHOUT LICENSES, INSURANCE, INSPECTIONS ETC. ALL - LEGALLY, COMPLETELY, PERMANENTLY.

www.peoples-rights.com
Toll-free
1-(877) 544-4718 24 hours
or send \$20.00 (postage/copy cost)

DONATIONS to
Peoples Rights Association
care of, 1624 Savannah Road BWH
Lewes, Delaware (19958-9999)

good conscience believe that the law is wrong or unconstitutional, is being applied unfairly, the accused is being unjustly charged or made "an example of" by the government, you have the right and responsibility to find them not guilty, despite what the judge or your fellow jurors say. Remember, your one not guilty vote is all that it takes to prevent conviction. You will get the credit or blame for the results of the trial and will have to live with your decision.

The practice of a juror using their conscience to find a defendant not guilty because the law is unjust has been called jury independence, jury veto, jury discretion, jury referendum, or, commonly by the media, as jury nullification.

Jury nullification is essentially when an accused individual is acquitted of a crime that he clearly committed because the jury feels there are extenuating circumstances, feels the law is unjust or applied unfairly, or because the sentence is too harsh for the crime.

While historically a legal right, judges and prosecutors today fear an informed jury as a loss of their power. Sometimes, the only way the government can get convictions of bad laws is to tell jurors they are required to uphold the law and to bar them from the jury if they disagree. Judges have even told jurors that they may not consider the U.S. Constitution in their deliberations.

Prosecutors fear the jury that has all the information, for they may find the government's case or the punishment to be absurd. Do you think a jury would have convicted the man for stealing tennis shoes if they knew he would receive a life sentence? The jurors in Brian Epis' case said they would not have convicted him if they knew he faced a mandatory 10-year sentence.

Jurors will routinely be disqualified if they question the law, if they disagree with the law, or if they question the constitutionality of the law. They are also disqualified if they agree with the concept of an informed jury or of jury nullification. Judges who are hostile to jury nullification have even used their power of "contempt of court" to jail jurors, without a trial, if they believe in or discuss jury nullification with other jurors. An informed jury scares the court like nothing else.

To get more information

For more information on jury rights and what you can do, contact the Fully Informed Jury Association (FIJA), an organization started to inform jurors of their powers and rights, at www.fija.org or P.O. Box 5570, Helena, MT 59604. Also, inform others about jury rights by talking with your friends or writing letters to local newspapers. The more jurors that are aware of their rights, the better our justice system will be.

In America today, our individual rights and freedoms are under constant attack and it is the duty of all of us to defend them. Read the *Constitution* and know your rights as a citizen. If called as a juror, don't immediately look for an excuse to get out of jury duty. Rather, be happy that you can use your right to analyze the case and to vote your conscience to ensure a fair trial. An informed jury is the way we have to stand up to a powerful government. Δ

The amazing Yogurt

By Habeeb Salloum

“Not again!” I thought to myself as I angrily opened my lunch bag. Mother had this day, as she had for a whole week, made us children *arous bi laban* (a yogurt paste spread generously on paper thin bread, then rolled into a long cylinder shape). How I envied my schoolmates munching on neat white bread sandwiches. As I moved away to eat my lunch in a semi-hidden corner, I childishly resolved that when I grew up there would be no more *arous bi laban* for me.

Little did I know in those home-staying days, and in fact long thereafter, that the yogurt which I once detested is one of the healthiest foods known to mankind. My parents had brought with them from Syria a love for this delectable and nutritious dairy product, consumed in the Middle East since the dawn of civilization. Perhaps they did not know its many benefits, but they, as I do now, relished its taste. We ate it almost every day for breakfast and for snacks and I am now sure that this healthy food with a cultural and medical past was one of the reasons we children were rarely sick during our childhood years.

The ancient yogis of India mixed yogurt with honey and called it the “food of the gods.” Cleopatra bathed in this milk product to give herself a clear and tender complexion and Genghis Khan fed it to his soldiers to give them courage. One of man’s earliest prepared foods, yogurt can claim

few equals in the folklore of the culinary arts.

Yet, even though it has been a cherished eatable in Middle Eastern and Central Asian lands since the dawn of civilization, in the West, before the turn of the century, it was hardly known. Only



recently has yogurt gained universal popularity and become a staple in the diet of many North Americans. Today, in the same fashion as in other parts of the world, especially in Asia and eastern Europe, its image as a life-extender has taken hold. Some label it “the miracle milk product,” others “a mystery food,” while the romantics call it “the elixir of life.”

A milk curdled by the actions of cultures with the consistency of custard, yogurt was discovered about 5,000 years ago on the Mesopotamia plains. Later, the Turks, who carried

it into eastern and central Europe, gave it the name we still use—yogurt. From the early days of its introduction in that part of the world, especially in Bulgaria, it caught on like wildfire and became known as a health food par excellence.

Modern nutritionists have established that its reputation as an almost medicinal food is justified. It has been found that yogurt contains a digestive enzyme which prolongs life. Humans naturally produce this enzyme in their childhood but it becomes deficient as they reach adulthood. It has also been proved that besides all the healthful elements found in milk, yogurt contains a teeming load of bacteria—about 100 million per gram. These multiply in the intestines and, by getting rid of the accumulated germs, relieve stomach ulcers, dysentery, and promote excellent digestion.

Much more easily digestible than milk, yogurt is ideal for the aged, pregnant women, children, and the sick. In addition, it is believed that regular eaters of this fermented milk tend to have clear skin and find no problem in enjoying a good night’s sleep.

All types of milk, ranging from reindeer to cow, can be utilized in the making of yogurt. However, the fat and nutrient values vary depending on whether it is prepared from cream, whole milk, partly skimmed milk, or skimmed milk and if it has additives like fruits or syrups included. On the average, 100 grams of regular, plain yogurt contain 77 calories, 7.1 grams carbohydrates, 5.3 grams protein, 3 grams fat, 229 mg. potassium, 181 mg. calcium, 142 mg. phosphorus, 75.5 mg. sodium, and vitamins B1, B2, and B12.

For those wishing to cut down on the amount of fat, cholesterol, and calories in their diets, this near perfect food made from skimmed milk is a godsend. In preparing meals, brands labeled low-fat and low-cholesterol

can be substituted for mayonnaise, sour cream, or similar products. This will constitute a tremendous improvement in their diets, at times working wonders.

Besides its nutritious value, yogurt is a marvelously versatile and adaptable food. It adds richness, flavor, and an appetizing aroma to a myriad of dishes. The possibilities of cooking with this tangy, cultured milk are infinite. It blends well with cheese, eggs, grains, meats, fruits, and vegetables and makes an excellent marinade. Delicious when flavored with syrups, nuts, herbs and spices, it enhances and is enhanced by other foods. The gastronomic repertoire of this so-called "milk of eternal life," which I had once shunned, is endless.

Basic yogurt

The following recipe can be made using all kinds and types of milk. If made from skim milk it is lower in fat

and calories but somewhat weak in flavor.

2 qts. milk
4 Tbsp. plain yogurt

Place the milk in a pot and bring it to a boil, then lower the heat and simmer uncovered for three minutes. Remove it from the heat and transfer to a bowl. Allow to cool to a luke-warm temperature. (You will know that milk is cool enough if your finger in the milk can stand the count of 10.)

Thoroughly stir in yogurt and cover, then wrap with a heavy towel and allow to stand for eight hours.

Refrigerate overnight before serving or use in preparation of food.

Note: Always set aside part of the yogurt for the next batch.

Yogurt gazpacho

This recipe serves about eight. It's excellent on hot summer days.

4 cups plain yogurt
2 cups water
1 cucumber, about 8 inches long
2 cloves garlic, crushed
½ cup pulverized almonds
4 Tbsp. finely chopped green onions
2 Tbsp. finely chopped coriander leaves
2 hard boiled eggs, peeled and chopped into small pieces
1 tsp. salt
1 tsp. pepper
⅛ tsp. cayenne
croutons

Thoroughly combine yogurt and water in a serving bowl, then stir in remaining ingredients, except croutons. Chill, then serve with each diner adding croutons to taste. Δ

Want more recipes?

Go to:

www.backwoodshome.com



How much does honest advice and wisdom cost?

Just \$29.95 when you buy THE bible of self-sufficiency!

The Encyclopedia of Country Living
by Carla Emery
Paperback, 896 pages

Now in an updated and ever-expanding 9th edition

Available at bookstores everywhere, or call
800-775-0817
to order.
Available online at
www.sasquatchbooks.com

SASQUATCH BOOKS

Here are 896 pages of old-fashioned (and up-to-date) advice with thousands of down-home country how-to's including...

- finding, judging, and buying rural property
- building shelter without burning through your cash
- cooking, baking, and preserving healthy homemade meals
- growing greens, grains, and other wholesome stuff
- and much, much more!

SUCCESSFUL COLD STORAGE

By Sylvia Gist

Crisp carrot sticks, fresh cabbage, and fried potatoes from my Montana garden in June? Yes, but only if I've kept them in cold storage from last summer's garden.

A garden is a wise investment and provides the freshest, most nutritious vegetables available during the summer. But I need it to supply vegetables year-round, and that can be a challenge here in northwest Montana. I lean toward self-sufficiency and eating a local, seasonal, sustainable diet; we try to grow what we eat and eat what we grow. We preserve, dehydrate, and freeze both fruits and vegetables, making a trip to the fruit room or freezer a real delight throughout the winter. But I also like to eat some fresh veggies and have succeeded in storing

carrots, potatoes, cabbage, and onions until just about the time the next crop is ready. I manage to keep beets, pumpkins, squash, and apples into late winter.

Ideally, I would have a root cellar which maintained the correct temperature for the produce I would like to keep. Unfortunately, it's not that ideal, so I have to look for other places to store things. Fortunately, different vegetables like different temperatures, so everything doesn't have to go in the same place. Other storage options (depending upon the

item) include in the ground, under a staircase, unheated rooms, outside stairwells, pits in the ground, or extra refrigerators, to name a few.

A storage method is only the last step to having successful cold storage and fresh vegetables in the winter. The first step begins with the seed catalog; it is extremely important to choose cultivars which store well. For example, not every type of carrot will



Heirloom Australian blue squash in mid-winter

still be edible the following May. Most seed catalogs are good at telling us which ones have good storage qualities. I have relied on their recommendations and have found particular cultivars of a number of vegetables that store very well for me.

Planting time and harvest time also affect the success of storage. Many storage vegetables are planted later and harvested after frost. In the following discussion, I will note what works best for me as I deal with a fairly short growing season and cool nights.

Carrots

The carrot named **Bolero**, a nantes-type hybrid, is a dual purpose carrot. It can be planted early for delicious sweet carrots, but when planted later (in June here), it will achieve a nice size of 6 to 7 inches in length with a 1-1½ inch diameter in time for fall storage. After storage, this carrot will still be crisp and sweet. Harvest as late as possible, after frost, but before

the ground freezes. I snap off the green tops right where they join the carrot.

I choose nice straight healthy carrots of good size for storage and bag up the forked, broken, nicked, small, or oversized ones to put in the refrigerator for immediate use in canning, juicing, or munching. Then I take five-gallon plastic buckets, clean washed

sand, and a pitcher of water to dampen it. Don't put too much water in the sand as it will pool in the bottom and make it too soggy. I try to dampen the sand in a different container and add the sand to my storage bucket as needed. First I put down a layer of sand and lay carrots side by side. I prefer the carrots don't touch. Then in goes another layer of sand to cover the first layer of carrots. I continue pressing carrots into the sand and adding sand until I am near the top of the bucket, where I put on an extra



Potatoes stored in a large basket on the floor of the fruit room

thick layer of sand and lay the lid on top.

This bucket is very heavy, so I put the carrots into it at the site it will spend the winter, which, for me, is at the bottom of a stairwell leading into the basement from the garage. When the weather gets really cold, I throw some rugs and blankets over the buckets to keep them from freezing. For ideal storage, carrots prefer 32° to 40° F and 90 to 95% humidity. If you don't have varmints underground looking for a free meal in winter, you can store them in the ground with a thick layer of mulch to prevent freezing.

Potatoes

Potatoes are a traditional fresh storage food, but all cultivars are not equal. The challenge is to have an edible supply year around.

Last fall I stored Red Norland, Sangre Red, Yukon Gold, and Kennebec potatoes of all sizes. Red Norland sprouted first, followed by Kennebec, Yukon Gold, and Sangre Red. **Sangre Red**, also called Sangre, is a round-to-oblong, white fleshed red potato with shallow eyes. It is a very good new potato as well as being great for storage. Digging them is easy, as they generally cluster very near the plant; it is also a heavy producer. Even though a local nursery lists them as so-so keepers, Sangre

has been the last to sprout in storage, with the largest potatoes keeping the best. I will eventually have to pull the sprouts from them also, but I do not have ideal storage facilities—just a room in the basement where I keep my canned goods, where the temperature ranges between 50° and

60° F during the year. Potatoes prefer 40 degrees. Colder temperatures will turn them sugary. Much too crisp and juicy for hash browns in the fall, these Sangres reach the perfect condition for frying in June and July.

By planting these early season potatoes the end of May, I get large potatoes by the end of August, which I harvest in late September. Planting earlier, I can have new potatoes earlier, but for storage it works better to plant later here where frosts may kill the tops the first of June and potatoes grow well into summer as the nights are cool and the days moderate.

Cabbage

One of the greatest challenges in storing vegetables has been the cabbage. I tried a number of methods, but nothing worked until I started to grow cabbage especially bred for storage. So far my favorite is **Storage #4** (available from Johnny's Seeds). It will produce a large, very solid head, which is still nice and solid the following June.

While I start my early cabbages in March (eight weeks before the last expected spring frost), I start the storage cabbages the first week in May, about 100 to 120 days before the first expected frost in the fall, as it will make most of its head late in summer, but grow some and hold well into fall. I dig mine before the ground freezes or before the weather stays below freezing. I cut off the root, leaving 6 inches of the stalk, and trim off those loose outer leaves. I then wrap each very loosely in a plastic grocery bag and store them in the extra refrigerator or upside down in the stairwell next to the buckets I store the carrots in. During the cold months, they do best in the stairwell where ventilation is better. They prefer 32-40 degrees with 90% humidity. As the temperature rises outside, I have to move them to a refrigerator to last into summer. They can produce cabbagey fumes, which may make one reconsider keeping them in the house long term.

Onions

Perhaps my favorite vegetable in storage is the onion. The sweet ones have to be eaten in the summer and early fall, but the pungent ones can last until you have the next crop. A couple of long-day hybrids, **Copra** and **Norstar**, have worked well for me. I start the seed indoors in February, feed them fish fertilizer,



Cabbage after a winter in storage

and set tiny plants out in early May. Norstar matures sooner than Copra, but both are narrow necked hard onions of medium size. In August, I quit watering them.

When they mature, pull and dry them in the sun. If the weather isn't warm enough, it is necessary to push the tops over and then pull them and lay them out to dry for quite a while. When they have dried sufficiently, remove the dry tops (but not the skins) and put the onions in a basket or mesh bag and set or hang in a dry, cold (32° to 35° F.) place where they get ventilation. I don't have a perfect place, but these two cultivars do well even when ideal storage can't quite be met.

For those who prefer non-hybrids, the yellow potato onion, a multiplier onion, is terrific. They are smaller (up to 1½ inch), but store extremely well, being very hard well into summer. You plant this onion in early fall and mulch for winter. Remove the mulch in spring to find sprouts which can soon provide green scallions or grow (with liberal watering) into bunches of small onions which will dry down in July. Be sure to save some to plant for the next crop.

Squash and pumpkins

An easy crop to store is squash or pumpkins. Nearly all kinds labeled winter squash and even mature summer squash, such as the **Mid East cousa** type, can keep almost six months if they are picked at the right time and cured properly. At harvest, the skin should be so hard that a fingernail won't puncture it. Leave the stem on and cure both squash and pumpkin in the sun at 70° to 80° F for 10 to 14 days. If properly cured and later stored at 55° to 60° F with 60 to 70% humidity, they should hold through most of the winter. An unheated bedroom works well for me. Pies from fresh pumpkin taste delicious in March.

Beets

I hadn't even considered storing beets until a few that I had just thrown in a plastic bag in the refrigerator were in pretty good shape a couple of months later. Upon investigation, I discovered that, although the common Detroit Dark Red that I was planting can be stored if done properly, there are specific beets for winter storage. I purchased some **Lutz Greenleaf** seed and sowed it in the spring along with my other spring beets. It took a long time to germinate and then grew slowly, but in October, I dug some softball sized beets to store. Unless you are using a long season beet like Lutz, the seed should be sown in June or July for late harvest.

Beets tend to be more susceptible to frost damage (their shoulders often stick out of the ground), so they should be harvested before a killing frost. Harvest only mature beets and cut off the tops, leaving an inch of stem. Do not remove any of the root



Bolero carrots being removed from the bucket of sand in June following eight months in storage

tip. Brush off the dirt and pack in layers in damp sawdust, sand, or moss. Keep cold (near 32° F) and very moist at 90 to 85% humidity. As mentioned before, unwashed beets keep quite a while in bags in a refrigerator. Depending upon storage conditions, beets can last anywhere from two to five months in storage.

Winter radishes

If you like radishes, you can enjoy them throughout the winter if you plant the winter type. There are a number of cultivars which lend themselves to storage: **Miyashige** (fall harvest Daikon), **Long Black Spanish**, **Misato Rose Flesh**, **China Rose**, **Round Black Spanish**, and **Radish Sakwajima Mammoth** to name a few. Generally, the planting date is July or early August, but each cultivar could be different, so pay attention to what the seed catalog tells you and adjust for your particular growing season. These radishes use more space; they not only may grow larger roots, but their tops are more leafy. Harvest in the fall and store only perfect roots. Trim off the leafy tops and treat like carrots, layered in moist sand, moss, or sawdust in your coldest above freezing storage place. They should last until February if stored properly.



Onions hanging in ventilated baskets in fruit room

Rutabagas/turnips

Rutabagas, known also as Swede turnips, are good candidates for storage. The turnip, however, gets mixed reviews. Johnny's Seeds doesn't recommend turnip storage, but some people have done it. Plant **Purple Top White Globe** in July or August and harvest three-inch maximum roots before heavy frost, cut off the tops, and treat them like carrots.

Laurentian and **Purple Top** (rutabaga, not turnip) are two common rutabaga cultivars recommended for winter storage. Plant in mid-June to mid-July or 90 days before intended harvest. Wait until there has been at least a couple of good frosts, usually October here, before digging for storage. If the roots are working their way out of the ground, I would hill some soil over them or mulch them when there may be a chance of freezing so the roots don't get damaged before I harvest. Cut off the tops and store like carrots. However, rutabagas shrivel easier than carrots, so you want to be sure to keep them moist. They can be waxed (sometimes you see them waxed in the supermarkets) to reduce dehydration; beeswax would be best if you choose this route. Rutabagas can be expected to last for two to four months in storage.

Celeriac

Celeriac, sometimes described as turnip-rooted celery, is an excellent keeper. **Monarch** and **Brilliant** are two good cultivars available. The trick with celeriac is the planting time. Start indoors (slow to germinate) in April but do not set out in the garden until June when the temperatures are averaging above 50° F. If the weather is too cold, the plant will think that it has passed through the first summer (in your house or greenhouse) and is in the winter cool down; when it warms up, the plant may bolt and go to seed.

Celeriac requires rich soil and plenty of moisture like celery, but is actually easier to grow. You don't want the plant to mature too early and get woody before you harvest. When you dig celeriac, break off the stocks, brush off the dirt, and remove long fine roots, if desired. It will keep a while on a shelf in the cellar; for the long haul, layer in moist sand, moss, or sawdust. Keep at 32° to 40° F with 90 to 95 % humidity.

Parsnips

Rated as the hardiest of all root vegetables, the parsnip could be awarded "best of show" when it comes to storage. **Harris Model** and related cultivars are popular. Since all parsnips are intended for storage, choose one that fits your needs (some are resistant to disease, etc.). Dig a deep bed and plant fresh seeds early in the spring, March through May (depending upon your season). Be patient as they may germinate slowly (up to 28 days). It takes a long season (100-120 days) and freezing weather to produce tasty parsnips. Frosty weather helps starch in the root turn to sugar so they taste sweeter. Then you can begin harvest.

You actually have four options. You can take advantage of all four. First, after a few moderate to heavy frosts, you can dig some to eat immediately. Because the roots can get very long, digging, not pulling, is recommended. Or to keep the ground from freezing, put down some mulch so you can dig later.

Even though the ground may not freeze under the mulch, you may not want to go out and dig in mid-winter; dig and store some in the cellar. These roots should have the leaves trimmed and be stored like carrots in damp sand, moss, or sawdust. Ideal conditions are 32-35 degrees and 90-95% humidity.

And for the final option, when the ground thaws in the spring, go out and dig the sweetest parsnips. They

will be good until new leaves are formed; they get woody after they begin to grow. With parsnips, the last really could be the best.

Apples

Apples are the only fruit I have tried to store fresh through the winter. Since there are hundreds of cultivars, there should be quite a few that store well. The nursery catalogs will usually indicate that attribute. Usually, the storage apple will ripen late, so that it can be picked in cool weather. The apple I have had great success with is **Honeycrisp**. It has a sweet-tart flavor and is exceptionally crisp, features that were still noticeable after months in my extra refrigerator. Although a tad shriveled, they made excellent applesauce.

Some helpful pointers in harvesting apples: pick mature fruit, leave the stem on the apple, and cool fruit overnight before storing if the day is somewhat warm. Apples last best if stored near 32° F at 80 to 90% humidity; the warmer the temperatures, the faster they soften. They should be kept in shallow layers in baskets or slatted crates; they also need to be checked for spoilage occasionally. It is wonderful to have some homegrown fresh fruit to go with all those winter vegetables. They should be stored separately, though, as apples give off ethylene gas, which ages vegetables.

General harvesting tips

In cold storage, we are taking advantage of the plant's natural dormant stage between seasons. Success rates are also raised by following proven guidelines. Harvesting in dry, cool weather is helpful because cold weather encourages the vegetables to store sugars and starches rather than water in the roots. Brush off the dirt gently, but cleaning isn't necessary. Don't bruise the produce. Store only the best produce; bruised, broken, or nicked vegetables be used soon. Tops

should be clipped immediately; if left on, they suck moisture from the root. Many tops are good to eat; chop some and dehydrate to add to soups later.

Folklore recommends that you pick apples and harvest root vegetables during the decrease of the moon, in the third and fourth quarters, because bruised spots will dry, not rot, and the food will keep better. If you follow the moon in planting and harvesting, you might want to keep this in mind also.

Two books which have been helpful for me to pursue my goal of providing the kitchen with year around vegetables from my garden are *Root Cellaring* by Mike and Nancy Bubel and *Four-Season Harvest* by Eliot Coleman. The first is about the natural cold storage of fruits and vegetables, with drawings for possible root cellars (and alternate hideaways) and details of how to store many different varieties of garden produce. Coleman's book is basically about ways to extend your gardening season, but includes a chapter on root cellars and indoor harvesting. Reading these books opened my eyes to the possibilities of having a larger variety of fresh vegetables from my own garden throughout the year.

Successful cold storage review

1. Select the best cultivar.
2. Plant at the right time.
3. Harvest at the right time.
4. Store properly.

I follow these steps, keep notes on planting and harvesting dates to determine the right time for my area, and store under the best conditions I have available. It can work for you too. Δ



If you're akin to me, you squabble over taking medicine like a four-year old child, reserving aspirin for the most severe pain. So when my stress meter hit an all time high and I started having trouble sleeping, I resisted those over the counter sleep medications that they push on the late night TV I began watching. I cut out caffeine, but still remained sleepless. My mind just would not hush up, it kept fluttering over everything from my to-do list for the next day to the dress I wore at my prom 20 years ago. I started reading late into the night, waiting for the book to somehow magnetically pull my eyelids downward. I ended up finishing two books a week, and falling asleep at around 2 a.m. each evening. After too many concerned comments about my tired appearance, my vanity prevailed and I tried an over-the-counter medication. The result was entirely too effective. Minutes after taking the pill I blacked out, left with a groggy, hangover feeling the next morning.

Then one day I heard about a little herb called valerian. I picked up a bottle and even started cultivating it in my garden. And I've been sleeping happily ever after.

Valerian (*valeriana officinalis*) is actually a very well known, worldwide sleep-aid that has been used for over 1000 years. The plant is found

throughout Europe and northern Asia in marshy locations such as ditches and along rivers. It is cultivated primarily in England, Holland, and the U.S. Valerian can be naturally spotted by its crowning bouquet of white to pink flowers atop its three to four-foot stems. It prefers rich soil with plentiful moisture, and blooms from June to September. When it is cultivated, the flowers are clipped after their premier to strengthen the rhizome. The true secret to valerian lies beneath the soil in its roots.

The sought after drug is found in the rhizome and roots of the valerian plant. The roots are harvested and dried. The drying process of the root unleashes the disagreeable odor of valerian. Consider yourself warned as you open your first bottle of valerian tablets. Do not assume that the batch is contaminated. Just swallow them and secure the lid as quickly as possible. The effective qualities of valerian are found in the same oil that releases this pungent odor, likened to the smell of stinky feet.

Valerian has a powerful effect on the nervous system. This may be due to concentrations of GABA (gamma-aminobutyric acid), which may decrease central nervous system activity. The overall effect is a calming, anxiety reducing, sleep enhancing state, which has no side effects or possibility for addiction. The perfect

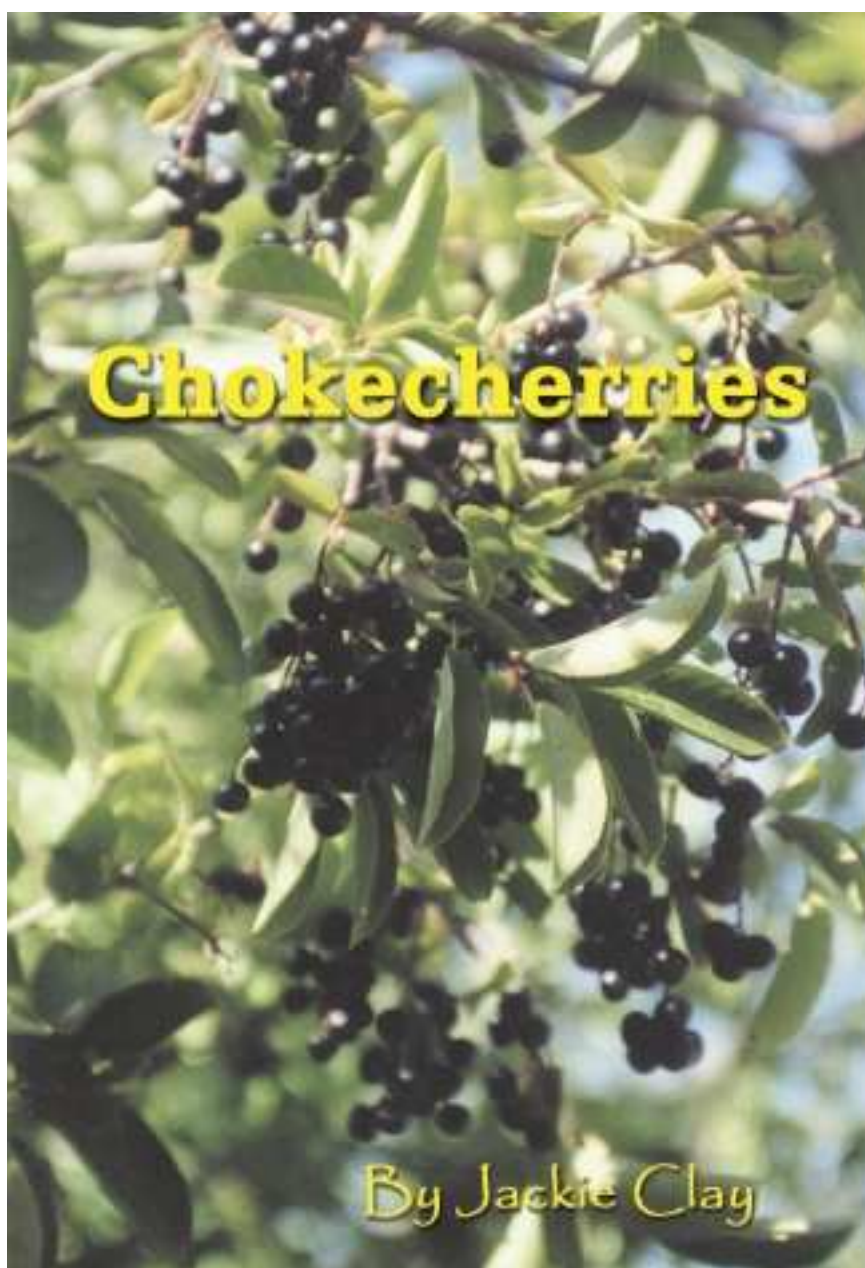
medication, right? That's what they've been thinking for years. In the 17th century it was used as a cough and pain remedy among the poorer classes. In Mediaeval times, it was used so widely that it garnered the name All Heal. It was even thought to be helpful in treating epilepsy.

Valerian root is available in 500 mg. capsules or one teaspoon of dried root may be used to steep a tea in one cup boiling water. It is most effective taken with water one hour before retiring to bed.

As with any herbal medication, it is important to consult with your physician to ensure that it does not interfere with any current medications or treatments. A small percentage of people taking valerian report a stimulating effect, and they should discontinue use of valerian immediately. It should not be used concurrently with other sedatives, antidepressants, or alcohol. It is not recommended for pregnant or lactating women, or children under the age of 12. Although, valerian has only a mild sedating quality, it is not recommended to operate heavy equipment or motor vehicles while taking it. Also it is suggested not to exceed the prescribed dose of valerian. Δ



Valeriana officinalis



Note chokecherries' leaf shape and clusters of berries

As chokecherries are found in nearly every state and climate, it's no wonder that Native Americans (who really lived self-reliance to the hilt!) of most tribes used them extensively. And, like ancient Indians, we also rely on these fruits of the wild orchard.

Finding and identifying chokecherries

Chokecherries grow along semi-open areas, often near water. They are usually a smallish shrub to small tree in shape, usually growing in groves. The leaf and bark resemble a sour domestic cherry. The chokecherries are easily spotted in the spring when their single white blossoms make

them stand out dramatically. The blossoms hang in small, long bunches and perfume the air for weeks.

The cherries themselves begin as red, but you don't want to eat them then or you'll really know where they got their name! Yuck! They are puckering bitter. But as the weeks pass, keep an eye on those red, grape-like clusters, and you'll see them get darker and darker, finally turning a deep purple-black. When they are first dark, they are still a bit sour, but that's when you want to pick them for jelly, jam, and preserves.

As with every other native fruit, you do want to make sure what you are picking. About the only non-edible I can think of that you could possibly confuse the cherries with is nightshade. The berries are the same colors: red then black. But nightshade, which is poisonous, is a vine, not a tree or shrub and the leaves are not cherry-like.

Picking chokecherries

Chokecherries are usually abundant and easy to pick. Bob and I just picked three gallons in an hour. The one good thing about chokecherries is that you don't have to climb to pick 'em. I learned a lesson from an old black bear sow with cubs. There was a row of chokecherries along one of our pastures. I'd already picked a lot of them, leaving the big, plump bunches out of my reach. She strolled up to a bush, then right over it. As the branches bent under her weight, she just stood there pawing bunches of cherries into her mouth with great delicacy.

The cubs quickly learned her trick and simply snacked on the juicy cherries from ground level. I watched those three bears for an hour, learning much about pro-berry picking.

You can use her tricks, bending the bushes down to easy-picking level, but be careful not to snap them by over-doing the bending. We'll all need those bushes next year.

I generally pick into a small basket or pail of no more than a gallon in capacity. This is easy to handle and still light when full. When it's full, I dump it into a larger pail or basket, safely waiting in the truck. One reason that I pick into a small basket is because I've used larger baskets, then dumped the whole shooting match on the ground. Since then, I don't put all my cherries in one basket. This is especially important when your children go harvesting with you. They want to help, but can get a little excited. Spills are frequent.

I hold my basket directly under a bunch and strip the whole bunch into it (like milking a cow). Picking one cherry at a time is extremely time-consuming as they are smaller than wild grapes.

Extracting the juice

The most common use for chokecherries is jelly. This is followed by wine-making. As we are a family of non-drinkers, I don't do this, but I do make a lot of jelly. To do either, you will need to extract the juice from the chokecherries. Be advised that although the cherries are



After "mooshing" and simmering, the mass is hung overnight in a jelly bag.



*David, the official taste tester.
I guess it passes.*

juicy, they actually produce a small amount of juice. Three gallons of cherries will give about 4-5 cups of juice.

The usual procedure is to add ½ cup of water to the chokecherries in a large kettle and simmer for ten minutes. I help this out a bit by mooshing the cherries with my hands, squashing as many as I can to release more juice. The skin will hold a lot of juice in, even when simmered. As the cherries heat, I continue mooshing. Watch it, as the water/juice will get hot quickly and can burn you.

My son, David, loves this, as it is fun, and it turns your hands purple. (I tell folks watching me that if wine-makers can stomp grapes with bare feet, I can "moosh" chokecherries!)

When the batch is too hot to handle, stir constantly with a wood spoon. You don't want it to scorch, which it can quickly do, ruining the whole batch.

To extract the juice, dampen three layers of cheesecloth or a clean old

sheet about 20" square. Lay the dampened cloth in a colander, in a large bowl, then pour the cherries and juice out into it. Carefully tie up this improvised jelly bag with a strong cord, then hang it on a sturdy nail, just above the bowl. Remove the colander.

This must drip over night. In the morning, gently squeeze the bag and again let it drip for an hour. You can tweak it a bit more by placing a weight on top of the bag, in a colander over a bowl. This will result in slightly cloudy jelly, but you'll get more juice.

If you are making jelly or wine, your juice is now ready to proceed. If you're in a great hurry or want to harvest tons more chokecherries, you can simply can the juice. I do it all the time. We even use the juice, mixed with other juices, such as apple and pear and add some honey as a natural alternative to Kool-Aid. The chokecherry juice is strong, so a little goes a long way, and it tastes great.

When you want to get more "harvest" out of your chokecherries, you can squish the warm cherries through a sieve. This lets you make jam and preserves. It's also how some Indian tribes processed the cherries to make pemmican and other dried cakes to

use for winter. Others ground whole cherries. I'm a little leery of this as the pits contain a toxin related to cyanide.

It takes quite a while to mash the cherries and juice through a sieve, but it's worth it, as you will get more to work with.

Here's a recipe for chokecherry jelly that is quite fool-proof.

Chokecherry jelly

5 cups juice

1 package Slim Set Fruit Pectin

3 cups sugar

You may add ½ cup water or apple juice to get exact measure (no more).

Add 1 package of Slim Set Fruit Pectin to juice in eight quart saucepan or pot, stirring well. Heat on high, stirring constantly, until it comes to a full boil. Stir in sugar, mixing well. Bring to full rolling boil, stirring constantly. Boil exactly one minute, stirring constantly. Remove from heat. Skim off foam, if desired. Fill hot, sterilized jars quickly, wipe off rims, and seal. Process immediately in hot water bath, which covers entire jars for five minutes. For altitudes above 1,000', check canning book for directions.

You can use the chokecherry pulp, which you have sieved, as above in

any sour cherry recipe for jams or preserves. I use this native cherry jam as "plum sauce" for meats and an addition to many oriental dishes calling for that certain sweet-sour combination. I even plop a tablespoonful into a stir-fry with a teaspoon of chili paste for unique robust flavor.

Dehydrated chokecherry pulp

Chokecherry pulp dehydrates very well, making an "ugly" but useful fruit leather. I often mix sugar with it to taste, then dehydrate to harder-than-leather. When I want to use it, I can break off small pieces to rehydrate. One of our favorite uses is rehydrated tiny bits of chokecherry pulp in fresh, steaming homemade muffins. They also work well in pancakes, waffles, breakfast cakes, etc.

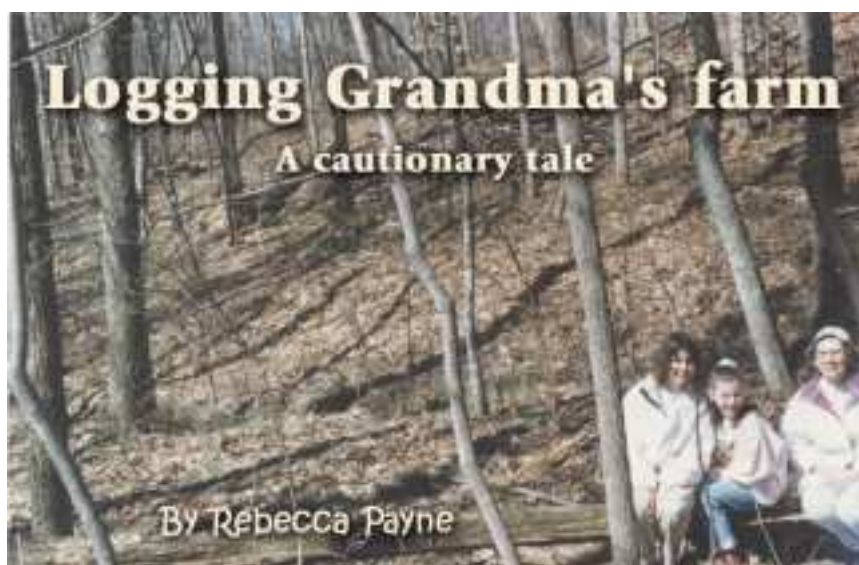
I shouldn't tell you David's secret, favorite snack, but I will. He likes to mix up a package of melted chocolate chips with pounded-to-flour dried chokecherries. He dips out spoonfuls of this mix onto a slightly buttered cookie sheet to dry. This turns out like large cherry-chocolate "kisses."

Indians and mountain men pounded dehydrated chokecherry pulp with smoked jerky and enough rendered fat to hold it together, making pemmican, the original "trail-mix," which was actually small, thin cakes. This provided a filling, high-energy food that kept well on the trail. This is a long way from so-called pemmican available today in plastic-wrapped strips—no fruit, no fat (calories for hard travelling in cold weather) and "mystery meat."

If you don't already make chokecherry gathering part of your family's wild harvesting, I hope you will next season. Remember to watch for those beautiful clusters of white blossoms in the springtime, calling you to enjoy their fall bounty. There's plenty for all of us. Ma bear, the robins, you.....and me! Δ



Jackie picks chokecherries along the river.



As we drove up the driveway to my mother's house shortly after the last logging truck had left, my children had their noses pressed against the window. They were looking to see the changes since their grandmother had had "some trees cut," as she liked to say. We smiled as we got out, but were met by my 70-year-old mother's worried face and whispered apology, "I'm sorry kids," she said. "I didn't know what I was getting into."

Together we took off through the 18 acres of woods that had been harvested by a company near her North Carolina home. As we walked farther, we began to see signs of logging activity. As much as I tried to keep a cheerful face, I was saddened by what had been done to the woods. There were piles of limbs and debris bulldozed into heaps higher than our heads all along the edge of the woods. For years, blackberries, scuppernongs, and dogwoods had proliferated in the shaded cool of the forest's edge, but now all that was buried. Deeper into the woods, tree-tops had been left where they fell, blocking our paths with an impenetrable crosshatch of bramble.

"Where's the creek?" my daughter asked, looking for the familiar landmark.

The creek was still there, but branches covered much of it. The only clear places to walk were the roads bulldozed clear for the logging trucks. These roads made raw violent gashes on the hillside where the brown forest floor had been rolled back, revealing red mud with broken, stripped saplings pushed to the edges.

"What about that big oak tree you asked them to save?" I asked. We

climbed over a pile of brush and cleared a path to the oak. "Well," my mother pointed, "At least it's still standing." It was standing, but limbs on one side had been broken and left dangling. A gash of missing bark scarred its trunk where a neighboring tree had slammed against it on its way down. Instead of being a proud sentinel, the oak looked defeated. Most other trees had lost limbs too, or sported areas stripped of bark. Some young saplings were bent double under the weight of branches left in the aftermath, forming arches we could walk under. Without the support of the other trees, the ones still standing waved back and forth like willow reeds.

The forest looked as if two giants had fought there, trampling and rooting and throwing around the furniture. And now, my mother and I were left with a mess to clean up. Our shoulders sank with the thought.

We loved our little farm just the way it was. Much of it was wooded, especially the places where the ground rolled steeply down to the creek. It had not produced any income to speak of since my grandfather stopped growing tobacco there



The author stands along one of hundreds of pile of brush that obscure the forest floor. All about her are saplings that had to be "freed" because they had been bent double by the heavy treetops.

20 years earlier. We were content to let it stay that way. I am still not sure exactly when we made the decision to have it logged.

Probably the idea was planted when a neighbor walked through and reported, "Those big pines are getting beetles. Y'all could make some money if you got them harvested now."

Or maybe it was the tax incentive that Mom could receive if she agreed to have her woodlot "managed." Or maybe it was when inflation finally overtook her pension to the point that paying the yearly taxes took all of her cash reserves. Then she started thinking about selling the farm or finding some way for it to pay for its keep.

What started out as a simple decision to get the stand of big pines cut soon snowballed. As long as she was at it, my mother reasoned, the tall poplars and oaks near the house should be cut too. They would bring good money and, besides, they had gotten so tall she was afraid one might crash down on the house in a strong storm. Looking further, she examined the trees at creekside. Where the woods sloped steeply to



Wide logging roads cut into what used to be the heart of the forest.

Thinking about logging? Here is a checklist to consider before you start.

1. Look at someone else's property to get an idea of what a logging operation looks like.
2. Get information packets from your county extension office or from the forestry department of a local university. Read and study the details.
3. Hire a professional to write contracts and guide the process. Check out his or her credentials. Don't be afraid to ask questions or make suggestions.
4. Don't take the first offer that comes along. The size of bids varies greatly.
5. Realize that big trucks need big roads and even wider turn-arounds. Adjoining fields or fences may become damaged also.
6. Contracts cannot put the land back the way it was. Big machinery compacts the soil, and even the best-intentioned companies will not be able to erase their tracks.
7. Figure out what will happen to the limbs and branches that are left behind. Keep them for firewood or specify that they be removed also.
8. Decide what to do with trees damaged during the harvest. Loggers will cut them down for you, but at a price. Know that you will lose more trees than just the marked ones.
9. In many places there are still loggers who use horses. Horses are much easier on the ground and the ears. Look for such an operation in your area.

the creek, many had uprooted over the years and fallen into a tangle. Maybe it wouldn't hurt to have some of the largest trees cut from there too.

First she asked around to find out if any logging was still done with a mule instead of machinery. My grandfather used to hire a gnarled old man who would come into the woods leading a loudly braying mule or two and cut trees one at a time. Grandpa would sell the trunks for lumber, then cut up the limbs for firewood. After a few rains had darkened the stumps and washed away the fresh sawdust, we could not even tell that he had been there. Unfortunately, we could not find such a logger.

Finally, she decided to hire a forest consultant. For a percentage of the

profits, these professionals guide land owners through the logging process. The county extension office recommended several names, and she picked one through personal recommendations. The consultant spent many hours in the woods with my mother. I want this one here to go," she would say, pointing out one that looked dangerously tall. He would mark trees to be cut with blue spray paint, then measure them and record their girth and type. The consultant made suggestions too. "I know you want to keep this one," he would say, "but it probably needs to go to let the logging trucks through."

Wait a minute. Logging trucks? She hadn't spent much time thinking about trucks. How big are these trucks? As the consultant sprayed another tree, he replied, "Well, the Bobcats skid the logs out to a standing area. From there they are put onto flat-bed trucks. Don't worry, they will make their own roads, and fill them in with gravel too, so as not to make ruts in the ground."

Roads? Gravel roads big enough to fit a trailer truck? This made her a little nervous, but she brushed off her own fears. Of course there would be logging roads. How silly not to have thought of that. What did she expect? Helicopters to lift the trees up and whisk them away? Roads and trucks and skidders...they were just part of the job. She was too far along to back out now.

She would call me at night and tell me of the day's dealings and we would talk over her fears. Living in Michigan, the process seemed remote to me and I wasn't much help. About this time, we should have sat down with the consultant and said, "Tell us now, just what exactly is going to happen to this farm?" We should have asked who keeps the tree tops, and if she keeps them, then what in the

world is she going to do with the tops of two hundred trees? That's a lot of firewood. What about trees damaged or knocked over when another falls against it. Who cuts those? We should have asked what kinds of equipment it takes to get an old oak tree out of the middle of the woods and what kind of path is left behind.

There were clues in the contract, if we had just read them carefully enough. Where the contract said, "There shall be no tree tops left in fields or on roadways," we should have read, "Tree tops will be bulldozed into giant heaps and left in the edge of the forest." Where we felt assured by reading, "Only those trees marked with blue paint will be cut," we should have known that any trees damaged or knocked over in the process would be left exactly as they were. We just didn't read deeply enough.

When the consultant was through marking trees, he put out a notice to logging companies to submit a bid. For the next few weeks, a parade of plaid-shirted men walked through the woods measuring and calculating. When they had sized up the timber, they made a sealed bid for the job and left it with the consultant. Mom started wondering what kind of operation would win the bid for her woods. Would they be careless, leaving cigarette butts and Styrofoam cups scattered all around? Would they park their pick-up trucks on the grass while they worked? How many people a day could she expect? How long would this take?



The contract said the stream would be left clear. Water still flowed through, but downed limbs made the area otherwise impassable.



Some of the remaining trees show ugly scars where other treefalls struck and tore off bark.

My mother had chosen to have the stand of pines clear-cut and the rest select-cut. The contract that the consultant drew up had provisions that the stream should be left clear and that cutting should not take place in the early spring, in order to avoid interrupting nesting cycles and to avoid tearing up soft ground with large trucks. We tried to think of everything we could to preserve the remaining forest. We learned later that we could have insisted on other clauses in the contract, requiring that the company dispose of the limbs and debris, for example, or specifying that roads be replanted. Of course, requiring the loggers to do these things would have lessened the amount of money she was paid.

Finally one crisp fall day, the consultant and the loggers gathered in

my mother's garage to open the bids and announce the winner. There was grumbling after the bids that some had been so much higher than the others. We learned later that there is typically a big difference in the size of bids for the same land. My mother was delighted with the amount of the high bid. Her fears of having to sell land to pay taxes disappeared.

But then she watched the first tree wobble and fall. Seeing these gentle giants, these old friends of hers succumb to the chainsaws made her sick. After the first day of thudding trees, cracking limbs, and whining saws, Mom would have paid the loggers back every penny to go home and forget the whole deal. She could not relax, hearing her trees falling. She dreamed about falling trees and her poor hard working father coming back from the grave to scold her. I invited her to stay with me in Michigan, but she could not leave.

Daily she listened in the stillness of her house and cried. Diesel-belching flatbed trucks shook the house as they roared by, pulling double trailers of skinned logs out of the driveway. She counted how many a day loaded and left and was shocked at how many trees were being cut. Had she really agreed to all this? She spent her days in the woods watching, and evenings looking at downed trees that had not yet been loaded, looking for any that had been cut with no blue paint mark. Finding a few that had been cut without paint marks, she demanded the loggers leave a tree standing for every one improperly cut, each time feeling triumphant that she had rescued a tree. Mostly, they were fair, yet it felt as if they would not stop until every tree was gone.

At the end, the silence was deafening. The truck noise faded and the chainsaws were still, but also silenced were the birds and frogs and other creatures. The wind did not even whisper through the trees as it used to. Walking through that first time,



Create Your Own Luxury

Rainbow Meadow has everything you need to create your own luscious, handmade soaps, lotions, spa treatments and bath salts. Call us first for quality essential oils, sumptuous base oils and butters and all those other hard-to-find ingredients.

FREE CATALOG 800-207-4047

RAINBOW MEADOW

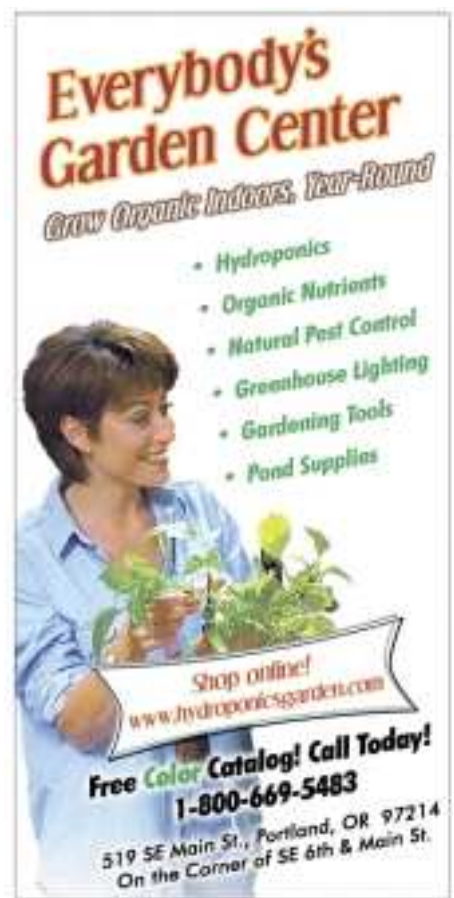
www.rainbowmeadow.com

looking at the brush and broken trees, all she could think was, "Oh no, what have I done?"

We were puzzled when the consultant came back afterward, smiled and said, "They did a beautiful job." From his point of view, the woods looked great. Not too much land had been scarred with roads and there were plenty of saplings left to grow into the bare spots. His trained eye saw the woods differently than our sentimental eyes.

Now, a couple of years later, young trees are starting to fill in the gaps, bringing hope that that forest will recover, but we know that it will be years before the children can romp through the leaves and moss. The loggers took more than just trees; they took the aesthetic value of what was left. Technically, we could probably log again in 20 years, a success for the loggers, but for us, we have piles of debris, broken branches, and scarred tree trunks to look at. We no longer have our woods for walks and picnics.

Looking out her back window recently, Mom exclaimed, "Well kids. I'll never live to see this forest the way it was, but someday you will. At least it paid the taxes. I could have sold it all for building lots you know." We know. That is the final cash crop. If you sell the land, that truly is the end. Δ



Everybody's Garden Center

Grow Organic Indoors, Year-Round

- Hydroponics
- Organic Nutrients
- Natural Pest Control
- Greenhouse Lighting
- Gardening Tools
- Pond Supplies

Shop online!
www.hydroponicsgarden.com

Free Color Catalog! Call Today!
1-800-669-5483

519 SE Main St., Portland, OR 97214
On the Corner of SE 6th & Main St.

the gee-whiz! page

By O.E. MacDougal

Art and invention

Today, inventors are considered technical wizards. But in the 19th century, inventors such as Thomas Edison and Guglielmo Marconi were considered "artists." This was based on their creative solutions to problems.

Oftentimes, the solutions inventors arrived at seemed simple and obvious—once they were demonstrated.

Though Edison's formal education ended at about the third grade, and he was almost without mathematical skills for most of his life, he had a way of approaching problems and a method of seizing chance discoveries that made him more than the equal of better educated men.

One story about him involves a new hire, a college graduate in engineering. He asked the new hire if he could figure out the volume of a light bulb. The young man left Edison's office and returned about an hour later. Using the mathematics he had learned at the university, he had calculated the bulb's volume and reported back to Edison with it.

Edison immediately told the young man his calculations were off by 10 percent. The man didn't see how that was possible after all the time he had spent doing calculations.

Edison took the bulb to a sink, broke off the end, filled it with water, then poured the water into a graduated beaker. And that, he told the young scientist, was the easiest way to find the volume of the bulb. An obvious and direct solution, but one that eluded someone "trapped" by his education.

When painting and sculpting were one

Ever wonder why so many of the ancient Greek and Roman statues have that "vacant" look in their eyes—eyes that stare without pupils? They look downright eerie. But that's not the way the Greeks and Romans saw them, because they didn't look that way back then. This is because the Greeks and Romans painted their statuary. They painted the skin, they painted the sculpted clothes the figures wore, and they painted in the eyes—pupils and all.

Even the beautiful friezes and columns of the Parthenon, now stark marble, were ornately painted in their heyday. But paint doesn't last. It weathers, it flakes off and, over the centuries, the statues, the temples, the friezes were denuded

and all that's left is the solid marble beneath. Now and then, statuary is found with remnants of paint still on them. But by the time of the Renaissance, when the "Classical" statuary of the ancient Greeks and Romans were rediscovered—first, by the Italians—most of the statues were already bare. (This has permanently influenced the way sculpture has been done ever since. Sculptures nowadays are never painted.)

Today, we can only imagine what these relics must have looked like when they had paint on them. Given the realistic details we now see in the naked marble, we must assume that they looked absolutely life-like when the Greeks and Romans painted them.

Abbreviations

It's got to strike at least a few people as odd that the abbreviation for *pound* is *lb.*, when there isn't an "L" or a "B" in the word pound, and that the abbreviation for *ounce* is *oz.*, when there is no "Z" in ounce.

The abbreviation for pound comes from the Latin word for scale, *libra*, and *libra* was also the term for an ancient Roman unit of weight equivalent to approximately 11½ of our modern ounces. *Libra* was also the traditional unit of weight in Italian, Spanish, and Portuguese speaking countries before the adoption of the metric system. *Libra* is also a zodiacal sign whose symbol is—the balance scale.

So, where did the word "pound" come from? It comes from another Latin word, *pondere*, which means "to weigh."

The word ounce comes from the Italian word *onza*, which was 1/12 of the old Italian unit of weight, the *libra*, hence the "Z" in *oz.*, while the word *onza* came from the Latin term *uncia* which was 1/12 of the Roman *libra*, and although our standard (*avoirdupois*) pound is made up of 16 *avoirdupois* ounces, a jeweler's pound, by which precious metals are measured, is called a *troy pound* and, like the Roman pound, is made up of 12 *troy ounces*.

How do *avoirdupois* pounds compare to *troy pounds*? An *avoirdupois* pound can be broken up into smaller units of measure called grains and an *avoirdupois* pound is 7,000 grains while a *troy pound* is 5,760 grains. Thus an *avoirdupois* ounce is 437½ grains while the jeweler's *troy ounce* weighs 480 grains.

Alternative lifestyles



By Dorothy Ainsworth

My brother Leonard was a devoted but comically unconventional single father with two teenaged sons. He worked as a consultant for city and private water departments as a chemical engineer “on call” and traveled a lot.

On one such three-month assignment, the supervisor encouraged him to stay on the premises of the huge stock yard where he worked as a water-quality inspector by day and a watchman at night. The grounds had an office with bathroom facilities and a shower.

Since it was summer and the kids were out of school, Leonard thought of a brilliant idea for the housing situation and acted on it without hesitation.

He bought three little 16-foot self-contained travel trailers cheap (\$300 apiece in the *Nickel WantAds*), towed them one by one into a shady corner of the yard and set them up “pow-wow” style—in a circle with all the doors facing the “campfire.” Each brave had his own private realm of

being, but the chief could keep an eye on things.

It worked unbelievably well. Son, Tim, 17, decorated his “bachelor pad” with rock star posters, and practiced his guitar constantly. Son, Dwain, 13, was into *Star Wars* and played handheld video games that went “bleep bleep” incessantly. Now Dad could finally rest in peace in his own quiet capsule after a hard day’s work.

The boys didn’t feel a need to compete or rebel because they each had their own space. If they had a temporary grievance with Dad or a spontaneous outburst with each other they could take great pleasure in slamming their doors shut and locking themselves inside. Being able to run away without leaving home was the perfect solution for disgruntled teenagers.

When they were in the mood to socialize, which was often, they’d all prop their doors open, sit on their makeshift steps, and contemplate the universe, or affectionately banter and tease each other. When it came to the wit and humor department though, the boys were hard-pressed to ever

get the best of their old man, who was a combination of Dave Barry, Gary Larson, and Einstein. I’ve never known a funnier man.

Almost every evening Leonard would bring out his acoustic guitar, and together with Tim on electric guitar and Dwain on harmonica, they’d enjoy a laughable jam session trading licks from Elvis to Aerosmith.

No matter what the mood-of-the-day was, one sure way to coax the boys out of their holes was by their noses. Leonard would cook up some aromatically enticing concoction, like hamburger and onions and fried potatoes, and pretty soon he’d hear two doors pop open. Then “sniff sniff,” “knock knock”: “Hey, Dad, we’re hungry. What’s for dinner?” right on cue.

Leonard saved a lot of money that summer. Before going on to the next job, he sold the trailers, got his investment back and moved to the big city—this time to a permanent position as superintendent of a water department in southern California. He rented a conventional house and tried

to live a conventional life (Studebaker collection notwithstanding), but nothing ever quite compared to the fun, comraderie, and freedom of those good ole campout days. (Sadly, we lost Leonard in a plane crash in 1999.)

When I visited the "Tin Men" that summer and saw their communal arrangement first-hand, I was impressed and amused by such a creative idea and have since concluded that it would work in a variety of circumstances.

Instead of burying your teenagers between the ages of 13 and 17 and digging them up later (as the saying goes), just lovingly set them up in a travel trailer(s) in the backyard or carport. Ideally, they could work and save enough money to buy their own trailer of choice, thus earning their precious privacy, and valuing their "real estate purchase" to the max.

There are other practical applications for "disposable" trailers: If you are a family developing a piece of land and building a house, you could buy two, three, or more camp trailers and enjoy temporary "modular-living" for the fun and novelty of it, as well as saving money on rent. Search the want-ads for retro "Sputnik era" trailers—they're a dime a dozen and you can always recycle them.

Involving the whole family in the building process is an enlightening and bonding experience for all. Mom and Dad could set up the main (larger) trailer or RV, with communal electrical hook-up and plumbing connected to the septic system, then stake out the kids here and there in the outpost camp trailers. After working together all day, each "party" would retire to their own cubbyhole to R&R. Not only teenagers crave the privacy of their own separate space. If they'd lis-

ten carefully they would hear an audible sigh of relief coming from Mom and Dad's trailer too.

Another use for a travel trailer is to convert it to a bathroom-on-wheels. Gut it out, build a painted-plywood shower, install a toilet and wash basin, hang a mirror and you're all set until the house is built. Of course you'll need electricity for the water heater (installed next to the shower stall), a water line, and septic hook-up, but that's it.

I know because I did just that while I was building my own house (which took years). When I was through using my "humble commode" I advertised it for sale in the *Nickel Want Ads* for \$500 and got so many calls I could have sold 20 of them. Mobile is the way to go. You can get rid of anything with wheels and a trailer hitch. Δ

THE 3 FOR 2 SPECIAL!

Subscribe (or renew) for a year and buy one anthology and get another anthology FREE!



480 pages



384 pages



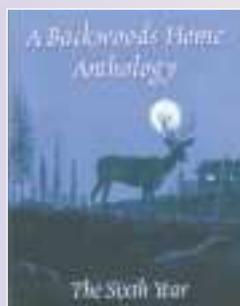
384 pages



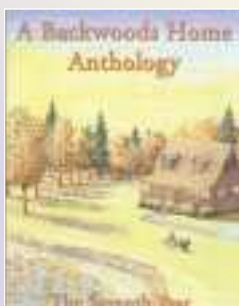
384 pages

only \$40.90

This deal is one of our most popular ever. There's no better way to start your subscription to BHM. You get years worth of information without the crunch to your pocketbook.



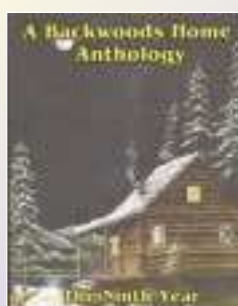
384 pages



384 pages



384 pages



384 pages



384 pages

Send a check or money order to BHM, P.O. Box 712, Gold Beach, OR 97444
Or use the order form on page 89, or order online at www.backwoodshome.com

1-800-835-2418

Homemade

cottage cheese, rhubarb pie, lemon custard pudding cake,
pasties, beef stew, biscuits, butter, grouse breast

By Jackie Clay

We've all been there; we are striving toward a self-reliant lifestyle, growing, raising, and foraging much of our family's food. After all, we realize that not only does this give us control over what we eat (chemicals, ripening sprays, insecticides, bacteria, etc.), but home-raised foods taste terrific. Using these home-raised foods in quantity for daily meals allows us to eat cheaper, thus being able to put aside precious cash for other needs.

Our grandparents and some of our parents lived through the depression, and I know most of them say there was very little cash, but their family ate wonderful meals. By putting a little effort and imagination into it, meals using as many home-raised ingredients as possible can bestow untold riches on a family with a tight budget.

"Making your own" is not labor intensive and can be done in minutes.

Making cottage cheese

I've just set a big bowl of cottage cheese and I timed myself. Total time, so far, is 10 minutes. I'm working on this article now, and when I finish I'll spend another few minutes before it is set to drain, nearly finished. And this will provide our family with five pounds of cottage cheese. Wonderful cheezie cottage cheese with no chemicals. Five pounds of that watered down stuff in a cottage cheese carton at the store costs over \$12. So who wants five pounds of cottage cheese? Legitimate question. Well, I'll pack two pounds in a freezer box and pop it into my freezer, we'll eat a pound fresh, and the other two pounds I'll

press to make a basic cream cheese to use either with herbs on crackers, homemade bread, or in desserts such as cheesecake. I also use fresh cottage cheese in such things as lasagna.

The "hardest" part of making cottage cheese is first setting the starter. While you can inoculate milk for cheeses with commercial buttermilk, you will have some failures as it is sometimes weak and old. You can purchase freeze-dried packets of all-purpose cultures or specialized cultures for such cheeses as cheddar or blue cheese, should your cheese making expand. (Be warned that once you try the super-simple cottage cheese, you'll immediately begin thinking of making all of your favorite cheeses.)

Making the cheese starter:

Have several ice cube trays on hand to hold 2 quarts. Check the cube sizes to see if they are 1 or 2 ounces, as you will need a measured amount of starter later on.

Sterilize a half-gallon canning jar and lid by boiling for 10 minutes. Set

the jar to cool, upside down. Pour fresh, strained, warm-from-the-animal milk into the warm jar, then put the lid and ring on snugly. Place in a water bath canner full of hot water, totally immersing the jar. Bring to a boil, then reduce to a simmering boil for 30 minutes.

Remove jar from kettle and let it cool to room temperature. The milk will be about 72°. Inoculate the milk quickly, adding the starter, then put the cover back on and gently rotate the jar to dissolve the starter, mixing it thoroughly with the milk.

Wrap with a couple of towels and hold at 72° for about 16-30 hours. You can use a yogurt incubator or simply set it over the pilot of your gas stove or some other inventive place. When done, the milk will be firm, like yogurt. As you won't be making 100 pounds of cheese, and as the starter will only remain good for about 3 days, it's easiest to freeze the batch using ice cube trays. Cover the full trays with foil or plastic wrap and



The garden, woods, and farmyard feeds a family from a well stocked pantry.

freeze. When hard, dump all the trays out into double baggies and store in the freezer. You can use all these cubes in the future for making cheeses, sour cream and other dairy products requiring a starter. Needless to say, I choose one day to make the starter (which only requires about an hour, all totaled) and another day to set my first batch of cheese.

Large curd cottage cheese:

1 gallon whole goat or cow milk
4 oz. of cheese starter (see recipe above)
1 tsp. rennet solution (4 drops liquid animal rennet mixed in $\frac{1}{3}$ cup warm, boiled water)
(makes about 1½ pounds)

1. Fill sink with very hot water. Pour the milk into a stainless steel kettle or deep glass container. Place a dairy thermometer in the milk, and wait until it reaches 72°.

2. Add the cheese starter and 1 tsp. of the rennet solution. Stir well. Cover the container and allow to ripen at 72° for 24 hours or more until it sets into a thick, custard-like curd.

3. Line a colander with a damp cheesecloth and pour in the curd. Catch the whey and feed it to the pigs or chickens, or save for other uses.

4. Gather up the cheesecloth, tie it closed with sturdy clean cord, and hang up the bag of curds over a bowl to drain over night.

5. Turn the cottage cheese out and serve cold or use it in any recipe.

You may save some, pressing it very firmly in any innovative mold (tin can with holes, PVC mold, etc.), which will result in a cream cheese type texture, used as a spread or even in cheese cakes. We add fresh herbs, fruits, and even ground nuts to our cottage cheese and pseudo-cream cheese, and never have leftovers. Total cost of a pound and a half of cream cheese, if you have your own milk, is about 12 cents.

Want it even cheaper and quicker? I often use this method.

Heat one gallon of fresh, warm milk to 180° and remove from heat. Add $\frac{1}{4}$ cup cider vinegar to the milk. The curd will form immediately. Drain in cheesecloth for several hours. Now it is cottage cheese. Or you can further press it into a semi-soft, cream cheese type product. Total cost is about three cents.

Desserts

When you have your own chickens, you can discover hundreds of ways to use eggs in meals without resorting to plain old eggs all the time. Some of the “sneakiest” ways of disposing of a bounty of eggs is to crank out the desserts.

Grandma’s rhubarb pie:

One of my family’s favorite non-egg use of eggs is Grandma’s rhubarb pie. As we have abundant rhubarb both in the spring and in the pantry, we enjoy this special treat year-round. And because of the added eggs, this rhubarb pie recipe is not sour or bitter.

9" pie pastry
fresh rhubarb to fill pie tin
1½ cups sugar
1 heaping Tbsp. flour
½ tsp. salt
1 Tbsp. butter
3 eggs, separated
cold water
3 Tbsp. sugar
pinch salt

Line a 9" pie tin with single pie pastry, fluting edge. Cut up enough fresh rhubarb to fill pie tin. In mixing bowl, combine 1½ cups of sugar, 1 heaping Tbsp. flour, ½ tsp. salt, 1 Tbsp. butter. Add 3 slightly beaten egg yolks, reserving the whites, and enough cold water to make a batter thin enough to pour from a spoon. Put rhubarb in unbaked pie shell and pour on batter. Bake at 350° until rhubarb is tender. While it is nearing this stage, make a meringue using 3 beat-

en egg whites, 3 Tbsp. sugar, and a pinch of salt. Beat until it holds peaks, then top the hot pie, sealing meringue to all the edges and peaking the top decoratively. Bake at 375° until meringue is golden brown. Serve cold. If I have lots of eggs, I sometimes double the meringue recipe, making a “mile-high-pie.” Impressive!

Lemon custard pudding cake:

Another favorite of ours is lemon custard pudding cake. It only takes a few minutes to mix and is really a treat. (Besides it uses 4 eggs and 6 tablespoons of homemade butter.)

6 Tbsp. flour
6 Tbsp. butter, melted
2 cups sugar, divided
4 eggs, separated
1½ cups milk
Grated peel of 1 lemon
2 Tbsp. fresh lemon juice
Confectioner’s sugar

In large mixing bowl, combine flour, butter, and 1½ cups sugar. Separate eggs; beat yolks and add to mixing bowl along with milk and lemon peel. Mix well. Add lemon juice. In another bowl, beat egg whites until stiff, slowly adding remaining ½ cup of sugar. Fold this into batter. Pour into a greased 2-quart baking dish. Place in a shallow pan of hot water and bake at 350° for one hour or until lightly browned. Serve warm or cold with powdered sugar dusted on top. Makes six servings.

As you examine the above recipes you’ll see that they contain ingredients found in my garden, canned or dried by me, or in our storage pantry. Our cow gives the milk/butter, the chickens give the eggs, the lemon I buy on sale. The rest is in the dry goods pantry. You can see I don’t have to go to the store a whole lot.

Entrees

How about entrees? These are even less of a problem when we are trying

to save money. With hunting or home raised meat supplying nearly all the meat, and the garden supplying the vegetables, take a look at these cheap, scrumptious meals:

Pasties:

4 8" pie pastry crusts, unbaked
1 lb. lean stewing beef/venison,
cut into ½" chunks
½" mushroom slices (we use wild,
foraged safe varieties)
8 med. raw carrots, sliced
1 med. raw rutabaga, diced
1 large raw onion, sliced
2 med. potatoes, diced into ½"
cubes
½ lb. butter
salt and pepper (or herbs) to taste

Place 1 pie crust on greased baking sheet and place ¼ of meat/vegetable mix on half of round. Add ¼ of the butter on top, then salt and pepper. Moisten the entire outer edge of the circle of pastry, then fold in half, over the filling. Crimp the edges well. You can use your fingers, pinching the pastry together, or use a fork to seal the edge. Repeat until you have four pasties, ready to bake. You may need two baking sheets. Prick vent holes on top to allow some steam to escape. I don't cut vents, as it allows too much steam to escape, resulting in rather dry filling.

Bake at 375° until golden brown. When you remove from the oven, brush butter on top. I use these a lot when canoeing or on a wilderness trek. Sort of old-fashioned MREs. And when you've eaten a pasty, you are full. Besides, they're really good. At home, you might serve them with leftover brown gravy. Just poke a hole in top, and drizzle the gravy inside to moisten up things a bit. Of course, this can be tough on the trail so I usually eat them dry. But you can rehydrate one of those cheap packs of instant brown gravy in about two minutes.

One tip, should you want to carry them on a trip. I wrap hot pasties in

several thicknesses of newspaper, then with tin foil. They will keep hot for hours this way. Welsh and Scandinavian miners used pasties as a hot, homemade lunch. And they needed something that would stick to their ribs the rest of the exhausting work day.

Beef stew:

Another of our old-fashioned favorites is good old beef stew, served with hot, homemade biscuits. Of course, I've made it as frequently with venison, elk, or moose as I have with beef. The taste of this stew never changes. It's always stupendous.

1 lb. good, lean stew meat, cut into
1" chunks, no fat, no grizzle
3 large potatoes, cut into 1"
chunks
2 large onions, quartered
4 carrots, sliced thickly
1 quart of tomato sauce
1 rib of celery, sliced

Place 2 Tbsp. butter into 2-quart cast iron Dutch oven and heat over medium flame. Sear meat on all sides. Add tomato sauce, 1 cup of water, then all vegetables. Mix well. Season to your family's taste. We use salt, pepper, and 1 Tbsp. of mild chili powder, plus 2 Tbsp. brown sugar. Cover and cook at a low heat until meat is very tender. If you must, add a bit of water as cooking progresses to avoid scorching. But at the last, I take off the cover to make it less like soup and more like a thick stew. Serve hot with biscuits.

Jackie's biscuits:

2 cups flour
2 tsp. baking powder
1 tsp. salt
⅓ cup shortening
½ cup dry milk
warm water

In medium mixing bowl, combine first five ingredients, mixing well but not over-doing it. Add warm water until dough is quite soft but not so

sticky you can't pat it out on a floured board. (If you get it too sticky, just add a bit of flour and knead it in lightly.) Pat it out on a floured board, then roll it flat, leaving it about ¾" thick. Grease a cookie sheet, then cut out biscuits with a biscuit cutter. I use a regular canning jar ring. It makes them just right. As you carry each one to the baking sheet, pat it in a little to "fluff it up," making it slightly thicker.

Arrange all biscuits so they are touching one another. Bake at 375° until they are just getting golden. Don't over-bake. Brush tops with butter and serve hot with honey and a good bowl of stew. They are great for breakfast, too. A nice touch is to sprinkle sesame or poppy seeds, even sugar and cinnamon, on top before serving.

Of course you can use fresh milk in place of dry milk. Just use warm milk in place of the dry milk and water. The warm liquid, I've found, makes the biscuits rise higher and become more tender. Also, you can use warm buttermilk in place of fresh milk for a different taste and texture. Just use cultured-buttermilk, not fresh buttermilk, left over from butter making.

I often make a double or even triple batch, then use these fluffy, satisfying delights for such things as chicken a la king, strawberry shortcake, or sausage patty, egg, and cheese breakfast biscuits.

Tasty butter:

And, of course, you'll want plenty of fresh butter to go with those hot biscuits. Here's a simple, quick way to turn your cow's cream into the most tasty butter you've ever eaten. I know words such as butter and eggs are not politically correct today, but if you work at feeding the cow and chickens, shoveling manure and chasing these critters in and out, you'll get the exercise necessary to burn up all that fat and cholesterol.

Skim off a quart of fresh, heavy cream. Pour into a sterilized churn. Never fill the churn or it will take for-



Photo: Bob Clay

Teach your children to fish for many hours of fun and lots of good eating.

ever to get the butter to “come.” You need room for it to slosh. Lacking a churn, don’t give up. I’ve found a super fast method. Dump $\frac{2}{3}$ of a blender full of heavy cream and turn on a slow setting. You want it to churn, not whip.

Keep a careful watch of the churning cream. As the butter begins to come, you’ll first notice the cream, now whipped cream, begin to separate. Flakes of solid will begin to appear, along with watery whey. Quite quickly, the flakes will clump into pea-sized pieces of butter. At this point, when using a blender, you might want to dump the contents out into a half-gallon canning jar (sterilized, of course). Finish the butter by simply shaking or rolling the jar back and forth until the butter clumps together in one or more large chunks. When using the churn, just churn until the butter comes.

Drain off the buttermilk, saving it to drink if you wish, then rinse the butter well with icy cold water, again churning or sloshing thoroughly.

Rinse the butter well, working it thoroughly afterward with a butter paddle or wooden spoon. You want as much water out of the butter as possible. As the butter seems free of water,

add $\frac{1}{2}$ tsp. salt into the pat, working it in well. For goat cream or cow cream when the cow is not on pasture, the cream is white. You may finely grate a carrot, then squeeze out the orange juice, adding it to the cream. This will give a pretty color to the butter, as well as making it extra sweet-tasting.

I like to use a decorative butter mold, which presses out $\frac{1}{4}$ lb. pats of butter, each with acorns and leaves stamped on top. When using any such wooden tools, dip them first in ice water or the butter will stick. Refrigerate the butter in well sealed containers, as butter very quickly picks up refrigerator odors. I often stack cooled patties of butter carefully, in wide mouth pint canning jars, closing firmly with a regular canning lid. You may freeze this butter, right in the jar, to use later.

Marinated grouse breast:

One of our favorite treats is marinated grouse breast, sautéed in butter, vegetables, and sprinkled with toasted almond slices. Sound good? You bet! Complicated? Not at all, taking only 15 minutes from start to finish, including time to dress the birds. Nuts, you say. You say you’ve taken twice that length of time to dress one bird. Check out this dressing tip my oldest son, Bill, discovered: Hold the dead bird by the feet. Place on a solid walkway or path, with the bird’s tail toward your feet, belly up. Stand on the wings. Now pull firmly-hard on the legs. There will be a ripping sound, and suddenly you will be shocked to find a skinless, pink breast, entrails in one portion, leaving only the drumsticks to pluck.

- 4 boneless, skinless grouse breasts, halved
- 1 cup Italian Dressing
- 2 Tbsp. butter
- 1 cup mixed vegetables (carrot, broccoli, onion, mushroom)
- 4 cups thinly sliced almonds

Marinate the grouse breast halves in Italian dressing overnight in fridge. When ready to cook, remove breasts from dressing, draining. In a heavy skillet, melt butter, then sauté the breasts, adding the vegetables as they begin to brown a bit. Stir frequently; add a bit of water if necessary to prevent scorching. When meat and vegetables are tender, add almonds. Continue cooking until almonds are toasted. Serve over rice or homemade noodles. This is another wild game meal that draws rave reviews from even the most critical diner.

You’ll quickly see that most of our meals cost pennies per serving. A lady once asked me if it was possible to feed a family of four for \$50 a week. She was thinking of oatmeal and macaroni, I guess. I showed her how she could feed her family well on half of that. It does take some work and thought, but you’d be surprised at how quickly one develops patterns of thought. For instance, I learned years ago that simply adding some wild blueberries or chopped apples to pancakes or muffins made them a delight instead of a cheap same-old.

Encourage your children to go fishing. My oldest children brought home a constant supply of fresh fish, while having many hours of exciting adventure to boot. Those fish not only provide fresh, fried fish for the family, but fish patties, cakes, loaf, and smoked fish. Even the lowly sucker, which made abundant runs in the spring, was transformed into the most wonderful smoked fish and fish cakes. One only has to study possibilities, not mourn deprivation, in order to succeed in plain old good meals. Let your children always remember the meals that Mom or Dad cooked.

Δ

THE IRREVERENT JOKE PAGE

(Believing it is important for people to be able to laugh at themselves, this is a continuing feature in *Backwoods Home Magazine*. We invite readers to submit any jokes you'd like to share to *BHM*, P.O. Box 712, Gold Beach, OR 97444. There is no payment for jokes used.)

A young man asked an old rich man how he made his money.

The old guy fingered his worsted wool vest and said, "Well, son, it was 1932. The depth of the Great Depression. I was down to my last nickel.

I invested that nickel in an apple. I spent the entire day polishing the apple and, at the end of the day, I sold the apple for ten cents. The next morning, I invested those ten cents in two apples. I spent the entire day polishing them and sold them at 5:00 pm for 20 cents. I continued this system for a month, by the end of which I'd accumulated a fortune of \$1.37.

Then my wife's father died and left us two million dollars..."

Two confirmed bachelors sat talking. Their conversation drifted from politics to cooking.

"I got a cookbook once," said one, "but I could never do anything with it."

"Too much fancy work in it, eh?" asked the other.

"You said it. Every one of the recipes began the same way, 'Take a clean dish...'"

A motorist, driving by a Texas ranch, hit and killed a calf that was crossing the road. The driver went to the owner of the calf and explained what had happened. He then asked what the animal was worth.

"Oh, about \$200 today," said the rancher. "But in six years it would have been worth \$900. So \$900 is what I'm out."

The motorist sat down, wrote out a check, and handing it to the farmer he said, "Here is the check for \$900. It's post-dated six years from now."

Coming out of church, Mrs. Smith asked her husband, "Do you think that Johnson girl is tinting her hair?"

"I didn't even see her," admitted Mr. Smith.

"And that dress Mrs. Davis was wearing," continued Mrs. Smith, "Really, don't tell me you think that's the proper outfit for a mother of two."

"I'm afraid I didn't notice that either," said Mr. Smith.

"Oh, for heaven's sake," snapped Mrs. Smith. "A lot of good it does you to go to church."

A New York lawyer went duck hunting in rural Down East Maine. He shot and dropped a bird, but it fell into a farmer's field on the other side of a fence. As the lawyer climbed over the fence, an elderly farmer drove up on his tractor and asked him what he was doing.

The litigator responded, "I shot a duck and it fell in this field, and now I'm going to retrieve it."

The old farmer replied, "This is my property and you are not coming over here."

The indignant lawyer said, "I am one of the best trial attorneys in the United States and, if you don't let me get that duck, I'll sue you and take everything you own.

The old farmer smiled and said, "Apparently, you don't know how we settle disputes Down East. We settle small disagreements like this with the Down East Three Kick Rule."

The lawyer asked, "What is the Down East Three Kick Rule?"

The Farmer replied, "Well, because the dispute occurs on my land, first I kick you three times and then you kick me three times and so on back and forth until someone gives up."

The attorney quickly thought about the proposed contest and decided that he could easily take the old codger. He agreed to abide by the local custom.

The old farmer slowly climbed down from the tractor and walked up to the attorney. His first kick planted the toe of his heavy steel toed work boot into the lawyer's groin and dropped him to his knees. His second kick to the midriff sent the lawyer's last meal gushing from his mouth. The barrister was on all fours when the farmer's third kick to his rear end sent him face-first into a fresh cow pie.

The lawyer summoned every bit of his will and managed to get to his feet. Wiping his face with the arm of his jacket, he said, "Okay, you old coot. Now it's my turn."

The old farmer smiled and said, "Naw, I give up. You can have the duck."

On a wall in a ladies room . . . "My husband follows me everywhere."

Written just below it . . . "I do not."

A husband said to his wife, "No, I don't hate your relatives. In fact, I like your mother-in-law better than I like mine."

DEFEATING DEBT

Personal bankruptcy as a legitimate means to get out of debt

By Don Chance

"Money does not solve money problems." — Dr. Phil McGraw

For many, if not most, people yearning for the self-reliant life, a heavy personal debt load is the single biggest barrier to realizing the backwoods dream.

There are plenty of conventional methods for reducing accumulated debt, and some of them will be discussed later. But perhaps the quickest and least stressful escape from under that interest-hungry debt monster for many (outside of winning the lottery, of course) is plain, old-fashioned, American-style personal bankruptcy; or Chapter 7, as it's better known in legal circles.

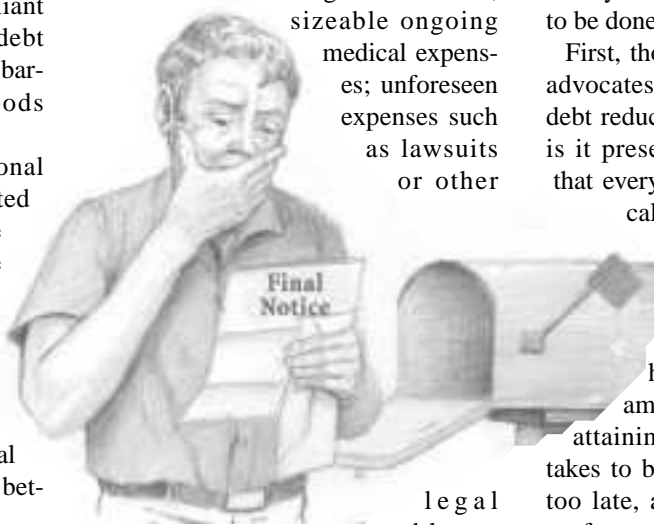
Usually considered the degrading, shame-laden financial equivalent of chewing off a leg to escape a bear trap, Chapter 7 Bankruptcy is probably one of the most maligned, misunderstood, and misrepresented aspects of personal financial management there is.

But one thing it's not is unusually rare, especially in these uncertain economic times. Almost two million Americans are expected to file for Chapter 7 Bankruptcy in 2003.

Not everyone seeking financial freedom through personal bankruptcy can qualify for Chapter 7 (though they might qualify for Chapter 13, but more about that later). You are, after all, asking the courts to eliminate debts you knowingly incurred yourself. But for those who do qualify—and the guidelines are usually fairly

broad—there are many valid motivations for filing Chapter 7. The most common reasons are: unexpected periods of prolonged unemployment; the tendency to max out credit cards

during those times; sizeable ongoing medical expenses; unforeseen expenses such as lawsuits or other



legal problems;

and for many, the particularly disheartening marital strife that often comes with heavy debt burden.

(But don't forget, bankruptcy flags stick out prominently on personal credit reports for 10 years.)

Still, the ongoing roll call of famous names publicly announcing to the world that they are flat busted and can no longer pay for the lavish lifestyles they appear to live is almost as legendary as some of the individual personalities themselves. From President Ulysses S. Grant to Burt Reynolds, Anna Nicole Smith, Kim Basinger, Larry King, Rush Limbaugh, Willie Nelson, on and on, thousands of prominent public figures have faced bankruptcy court. Even so, many of them seem to retain those lavish celebrity lifestyles after declar-

ing bankruptcy, and go on living large even as their financial statements and earnings records become juicy tabloid fodder.

How?

Easy: they follow the law. But it has to be done *juuuust right*.

First, though, this article in no way advocates bankruptcy as a desirable debt reduction plan for everyone, nor is it presented with the assumption that everyone reading it is automati-

cally in serious financial trouble

and needs or wants something as drastic as personal bankruptcy in order to survive. The idea here is merely to offer one among many legal methods of attaining the financial freedom it takes to build your dream before it's too late, and it barely scratches the surface of this highly complicated subject.

So let's get to it.

Chapter 7

Essentially, Chapter 7 Bankruptcy can be loosely defined as a perfectly legal court proceeding available to those in a financial crisis, and is a pragmatic means of becoming debt-free in order to facilitate a fresh start (as opposed to Chapter 13 Bankruptcy, which is structured to provide more of a "breathing space" for those who choose to meet their credit obligations; or Chapter 12, which is only available to farmers who don't have large non-farm related debts).

But, like legally declaring yourself a corporate entity in order to take advantage of certain tax breaks,

Chapter 7 Bankruptcy is available, with all its restrictions, positives and negatives, to anyone willing to pay the \$200 filing fee, then follow—to the letter—the intricate legal procedures and qualification rules involved.

Getting started

As with serious healthcare issues, the first thing to do when deciding to pursue personal bankruptcy is ignore those debt counseling commercials you see on television and seek out a specialist—in this case an experienced bankruptcy lawyer. You're not specifically required to get legal representation, and many filers don't. But Chapter 7 Bankruptcy is a Federal court proceeding, with different states imposing unique spins on its various guidelines and exemptions, making it a highly exacting legal specialty that almost demands some kind of expertise.

Sure, you might pay what seems like a pretty steep lawyers' bill (as much as \$1,500 or more), but you will probably save many, many times that amount by hiring a skilled specialist, and save yourself much of the emotional stress any complicated legal action can cause. (Initial consultations are generally free, and most lawyers will set up payment plans. But the penalties for non-payment by such obvious credit risks as bankruptcy filers are usually astoundingly stiff; so you'd better pay up even if you have to miss an occasional meal.)

Also, it wouldn't hurt to schedule a half hour with a good independent personal financial consultant. There are usually plenty of them listed in the Yellow Pages, and they can usually provide an encouraging second opinion.

The second absolutely necessary chore, especially if you don't choose to hire a lawyer, is self-education. The World Wide Web provides perhaps the greatest source of research materials ever devised by mankind.

Everything about everything is out there on the 'net somewhere, and it only takes typing in a couple of keywords to bring up thousands of pages of information.

But be careful. Most bankruptcy-related websites do offer a few good nuggets of information, but almost all are fronts for either pro or con agendas, and survive primarily by generating a false sense of urgency. Those against bankruptcy will typically end up offering some fee-based alternative, and those favoring Chapter 7 will usually offer some "secret shortcut" plan or eBook for sale. But, by comparing those little informational gems all the sites give out as bait, you should get a pretty clear picture of the true facts.

Don't have access to a computer or other internet-capable device? Go to the library. Public libraries are usually well-stocked with plenty of titles on personal bankruptcy, and college libraries have whole rooms dedicated to legal and business issues.

But, unless you know the person very well, and share a really strong friendship, it's not a good idea to ask a friend or relative who's gone through the process about it. For many people, personal bankruptcy still carries an unwarranted stigma (perpetuated, of course, by lenders), and can become such a taboo conversation subject that even the strongest friendships might suffer.

Stick with agenda-neutral sources, and you'll come out better informed.

Let's do 'er!

Once you've made the decision to proceed, you have two choices: prepare all the legal forms and documents yourself (if you choose to represent yourself), or turn everything over to your lawyer and follow his exact instructions.

The Federal court for your district will supply all the forms and informational brochures you need to get started at filing time, but you'll still have

the same basic set of questions everyone else has: what can you expect to keep, and what can you expect to lose?

Through personal bankruptcy, you **can**

- Usually keep your family home and vehicles if you own them outright or are buying them on credit.

- Keep most of your credit-obtained personal belongings, household goods, and tools and/or supplies used in making a living, depending on your state guidelines.

- Expect to keep your bankruptcy reasonably confidential. (Sure, Chapter 7 Bankruptcies are publicly recorded court procedures, and will definitely show up on credit reports. But someone would have to search out your specific records to find them; and even then, the records couldn't be used to discriminate against you.)

- Get credit again. (After 10 years, a bankruptcy can no longer appear on your credit report—and in some cases, a bankruptcy may even improve your credit rating. But you can qualify for secured credit card programs almost immediately by depositing a few hundred dollars in a bank or other lending institution, then opening a credit card account with the cash as secure collateral. In fact, in many states you can even apply for a home or farm mortgage just two years after filing and, if your personal income situation is healthy and you meet the down payment requirements, often get the loan under the same terms and conditions as anyone else.)

But you **cannot**

- Keep the credit cards or non-card credit accounts you discharge through bankruptcy.
- Stay in a rented house or apartment, or keep a leased car, without making special arrangements with the owners.
- Buy real estate on credit one week, then declare bankruptcy

the next. (You must wait at least 60 days after making a major credit purchase such as property or an expensive vehicle to file, but even then you will almost certainly be suspected of attempted fraud.)

- Discharge debts you forget to declare. (So get it right the first time.)
- Wipe out child support or alimony payments and/or penalties.
- Be free of fines, penalties, judgments and criminal restitution resulting from illegal activities such as drunk driving, embezzlement, traffic violations, and so on.
- Shrug off student loans. (Those were made with the understanding that they were to be used in obtaining a means of earning a living, and so are assumed to be money makers no matter how you actually used them.)
- Expect to hang on to non-essential big ticket luxury items you're making payments on, such as a cabin cruiser boat, that beloved new touring motorcycle, a hobby racecar, a fishing shack, an RV, or any other unnecessary dollar-gobbling playthings. (Check with your lawyer, though; some states just may allow some of them.)
- Eliminate unpaid bills on regular utilities such as water, electricity, cable television, phone service, etc.
- Declare bankruptcy again for at least six years.

Again, Chapter 7 Bankruptcy is *not* for everyone. You will have to attend a hearing, in front of a Federal judge, and answer some standard questions. But the vast majority of court appearances are over within 10 minutes, and you will receive immediate relief from your debts. If you've been getting harassing phone calls, they will stop right away. Same with lawsuit threats. Your credit rating will instant-

ly disappear, but you will be eligible for several credit repair programs.

Bankruptcy is not a perfect system of clearing debt from your life so that you can move on, but none are. (Well, maybe inheriting a few million dollars from some rich relative you didn't like all that well, or discovering a lost Van Gogh painting in your attic might be sorta perfect, but those cases tend to be really rare, too.) The important thing here is that bankruptcy does work for many people.

While virtually all creditors abhor the very idea that such soft-headed practices can legally exist in a society that reveres money as much as ours, most lawyers and personal financial consultants consider it just another legitimate money management program. But is it right for you?

The Chapter 13 alternative

As with Chapter 7, Chapter 13 Bankruptcy has its defenders and detractors, and neither is necessarily wrong.

Basically, under Chapter 13, a plan is developed to pay back all or part of your debts within a three to five-year time frame with revenues based on your future income. If this sounds familiar, it's because practically all of those private credit counseling services we see advertised on television are based on Chapter 13 guidelines—the main difference being that Chapter 13 is a federally administered program with serious legal ramifications and penalties for non-compliance, while participation in those privately run counseling services is strictly voluntary (and by the way, “non-profit” or not, all of them charge a pretty stiff participation fee).

In other words, a counseling service might sue you for non-payment if you can't or won't keep up your payments, but a Federal court can get downright nasty.

Conventional alternatives to bankruptcy

Though this article is primarily about eliminating personal debt through bankruptcy, so as to open up the possibility of realizing your self-reliant dream by starting fresh and free of debt, not everyone seeking the independent lifestyle will be comfortable with Chapter 7. A strong sense of self confidence, pride, and personal integrity often accompanies the desire to go it alone, and bankruptcy might seem like a humiliating way to stick someone else for some perceived personal failing. To those people, there are a variety of bankruptcy alternatives available.

- Get a debt consolidation loan. If you have good credit, you can get a “bill payer” loan from your bank or lending institution, eliminating the various credit card interest rates and combining your debt into one monthly payment. Still, though, if you can't or won't control your credit card spending, the bank loan will just increase your monthly debt burden without giving back any positive results.
- Contact your creditors about the possibility of just reducing your debt. It does work. Mention the word “bankruptcy,” and most credit providers will immediately begin offering plans on how to reduce your debt, from temporarily eliminating the interest to writing off large chunks of the principle (as much as 50% in some cases). Again, this method only works for the long term if you keep a tight control over your credit spending.
- Sell something, and use the money to pay your bills. It sounds outrageously obvious, but it's amazing how few people think of “repositioning” their assets in order to better satisfy their debt loads. For instance;

got a 45k SUV in the garage? Even selling it for two-thirds of its worth, and buying a cheaper ride, should give you enough leftover change to reduce at least some of your debts.

Since most responsible adults are already familiar with most of the other conventional debt-reduction methods, such as getting a second job, enlisting the services of one of those credit counseling outfits, or "taking in wash" like my grandmother used to do during the Great Depression, this section won't labor the point. But no matter the method you choose in seeking non-windfall financial freedom, the importance of taking firmer control over your financial situation can't be overstated: not if you genuinely want to escape the life of a career wage slave.

In the end . . .

Let's simplify it.

Let's say you have a young family, a home mortgage, car payments, and a mountain of credit card debt. You want to raise your children away from the dangers, temptations, and distractions of the modern metropolitan setting, but you're too deep in debt to just pick up and head off into the countryside.

You've read this piece, and are wondering if personal bankruptcy is a realistic means of reaching your goals of self-sufficiency. Declaring Chapter 7 is as irreversible a choice as going back home was for the vast majority of the European immigrants of the past, and you desperately want to make the right decision.

Yes, the bankruptcy question will always come up on every credit application you ever fill out, and it legally demands an honest answer. And there will always be those who find the idea downright despicable for a variety of perfectly understandable personal reasons.

But declaring bankruptcy does not mean you'll become some kind of charity case in the eyes of the law.

Homemade Purity

FREE Information Packet
1-800-874-9028

Transform ordinary water into the purest

- Effectively remove 99% of impurities
- Consistently produce fresh, high quality H₂O
- Electric & non-electric home distillers
- 100% distilled water at 3-16 gallons a day

www.waterwise.com
PO Box 45816 Center Hill FL 33514-0458

© 2001 Waterwise Inc.



Those judges have seen it all, and they're not out to rob you of your dignity. They know that if you were capable of holding a job before your hearing, you'll be just as capable afterwards; but at least you'll have options. Do the homework—the research, the program comparisons, the serious thinking—it takes to make, and then live by, such a profound life-altering decision.

You'll find that you will probably be able to keep your house and at least one vehicle, and all of your personal possessions. But you won't be able to hang onto any "luxury" items you're still paying for, like a jet ski or that new \$1200 pump shotgun.

If you go ahead and file, take the next couple of years to learn to live without credit while you're shopping around for the perfect homestead spot. Selling your house will give you the down payment money you need to buy your dream home, and you're still no worse off than you were before. In many ways, you're in a far stronger financial position.

Chapter 7 Bankruptcy can be one of the hardest decisions ever faced. But remember, if for some oddball reason you don't win the lottery after all, life is filled with just those kinds of choices, and always will be.

Your life will never be quite the same after filing for bankruptcy, but that's not necessarily a bad thing. Whether the change personal bank-

Mountain Home Basics

for home & family...

Products include:

- Excalibur Dehydrators
- Grain Mills
- Stainless Steel Juicers
- Apple Peelers
- Canning Equipment
- and much more

Call or write for a free color brochure or visit our website at:

www.dehydrators.com
Mountain Home Basics
P.O. Box 276
Grand Junction, CO 81503
800-572-9549

ruptcy brings into your life is right or wrong for you in the long run is a question you will ultimately decide for yourself. Those hard decisions are an everyday part of living.

But then, isn't moving back to the land a life-altering decision in itself?
△

A simple backwoods hay baler

By Rev. J. D. Hooker

During the winter months, Steve and his wife Tandy feed between 120 and 150 bales of hay to a herd of pretty high-quality dairy goats on their northern Indiana farm. This couple's major source of income is derived from selling these goats. Once their initial investment in breeding stock was recouped, they hardly incurred any further expenses except for minor veterinary bills. By themselves they produce all of the hay their animals require, but the way their property is laid out makes it pretty well impossible to use any standard sort of tractor-drawn mowers, balers, or other equipment. Yet, wanting to become entirely self-sufficient in this area, they improvised and

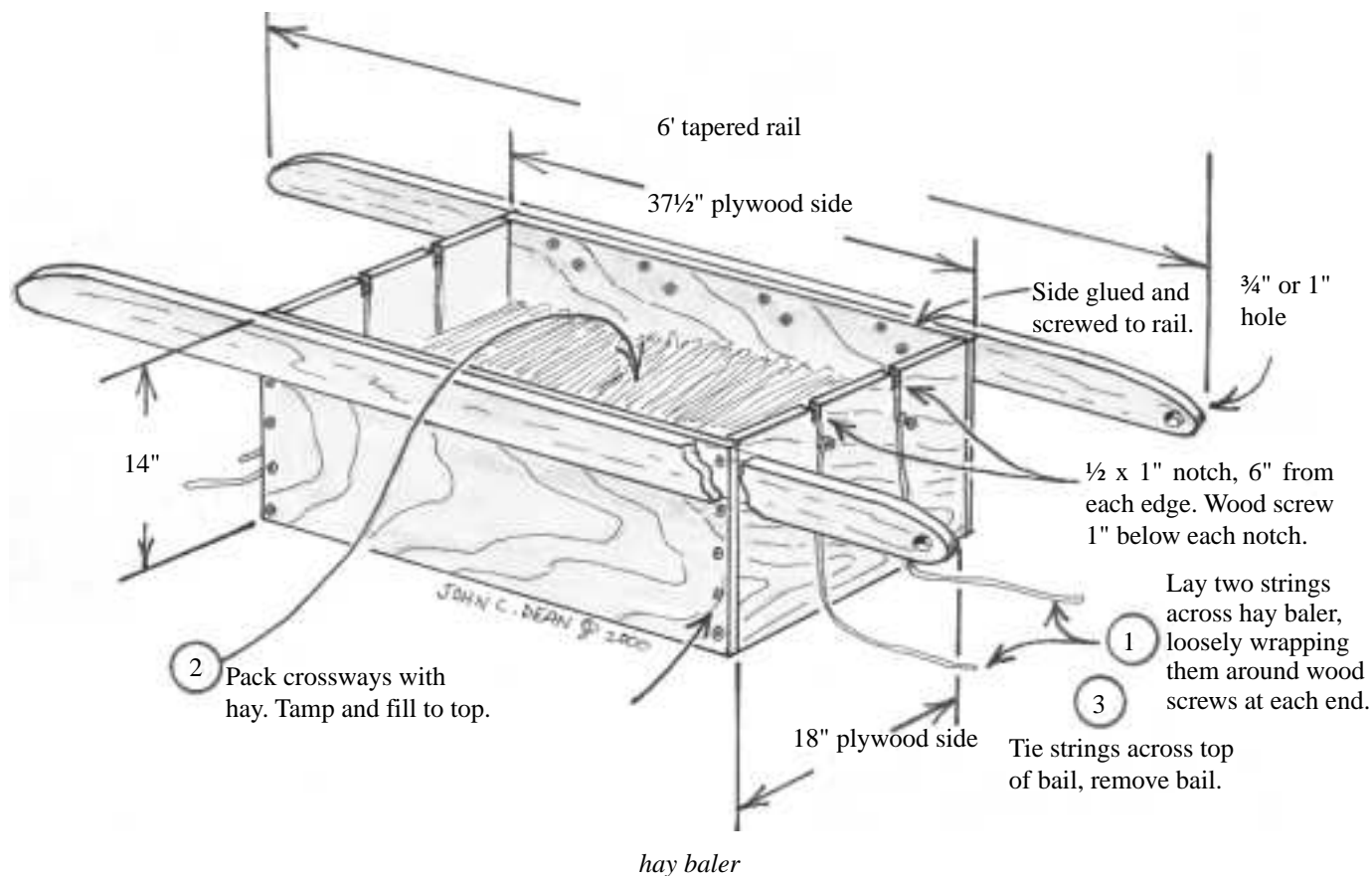
came up with their own system for mowing and baling.

First, for the mowing, they searched around for nearly an entire summer until they located a front-mounting, sickle-bar attachment for the older, two-wheeled Gravelly tractor that they use for nearly every purpose on their small acreage. Any other brand of walk-behind, sickle-bar mower would work just as nicely. Steve and Tandy like the idea of owning a single machine they can use for nearly all of their equipment needs by simply switching attachments. Of course this has always been one of the strongest points of those older Gravelly tractors.

The first winter they merely forked their dried grass into haystacks. Well covered with weighted-down sheets of plastic, and left right out in the open, this hay kept well enough. Still,

Steve and Tandy were certain that regular bales would be much easier to handle and store. Which was why the next spring found Steve designing and putting together his own readily-portable, simple-to-use, human-powered, wooden hay baler. Once we'd seen his simple improvisation in use, my wife and I realized just how valuable it would be in our own operation. That same week I put together a duplicate for our own use.

The entire "baler" can be put together in just a couple of hours, using only a single 4x8 sheet of $\frac{3}{4}$ " plywood, a couple of six-foot 2x4s, some $1\frac{1}{2}$ " wood screws, and a tube of construction adhesive. If you keep it painted or varnished for protection from the elements, it should hold up to at least a lifetime of use.



If you're interested in producing your own simple, wooden baler, your first step will be to cut two 37½"x14" pieces from the sheet of ¾" plywood. Then cut two more pieces measuring 18"x14" each, from the remainder. Now, simply use some of the wood screws and construction adhesive to assemble the box-like body of the baler, as shown in the illustration.

Next, both ends of the six-foot lengths of 2x4 are rounded off, using a saber-saw or similar tool, as shown. Again, use both construction adhesive and wood screws to attach these handles to the top edge of the box as illustrated.

Along the upper edge of each of the narrower ends of the box, cut roughly ½"x1" notches about 6" from each side. Then, on the outside of the box and just about an inch below each of these notches, drive in a single screw about half way. Finally, drill ¾" to 1" diameter tow-rope holes through the

rounded-off ends of each of the 2x4 pieces.

Steve simply flips the baler upside down, using the 2x4 handles as sled runners, then tows the baler behind their Gravely's riding surrey to where he'll be using it.

To use the baler, cut two pieces of baling twine, each roughly 8½' or 9' long. Fashion a loop in one end of each piece of twine, and slip it over one of the protruding screw heads. Then you can sort of drape each length of twine loosely in place in the baler, with a couple of wraps around each of the opposite screw heads to keep them in place.

Once the baler has been packed as full as possible with hay, using your feet to stomp it in tightly, remove the twine from the screws, slip each of the loose ends through its corresponding loop, pull it tight, and knot it securely. Now you can grasp the strings, lift the completed bale from

the baler, and you're all ready to start over and produce your next bale.

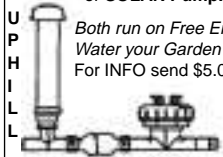
Steve and Tandy have found that it's not a difficult task to bale about a third of an acre on a pleasant summer afternoon. That's with the aid of their children, who think bouncing up and down to pack the hay tightly inside the baler is great fun. Δ

For more information on gardening, livestock, & self-sufficiency, check out our great discount book deals on page 98.

PUMP WATER uphill with no gas or electricity. It's possible with the **FLEMING HYDRO-RAM** or **SOLAR Pump**.

UPHILL Both run on Free Energy - Sun or Gravity. Water your Garden or Livestock. For INFO send \$5.00 to:

Ram Company
512 Dillard Hill Rd.-BWH
Lowesville, VA 22967
(800)227-8511



Hardy Diesel The Worlds Largest Direct Supplier of Quality Home Energy Products

Bullet Proof 8kW #1 Since 1977

- 1800 RPM
- Water Cooled
- Murphy Safety Switch
- Factory Direct
- Brushless Alternator
- Electric Start
- Diesel Powered
- Powder Coated Skid
- Reliable

Sale \$2,295

Complete Home Energy Systems

Featuring the following brands: Xantrex/Trace • Whisper Wind Generators • Kyocera • Siemens • SDMO • Generac • RV Products • Connect Energy • Harris Hydro • Bogart Engineering • Unirac • Zomeworks • Sharp • Multiquip • SMA America & more.

800 341 7027 www.hardydiecel.com



Diagnosing appendicitis

By Dr. Bill Glade

It is Saturday afternoon, you are trying to get some work done and your child has a tummy ache. It has only hurt for a few hours and they are still playing, but the complaints continue. Lunch didn't go well, but there isn't a fever.

Should you wait and watch? Would it be better to drive to the Emergency Room and have the child examined?

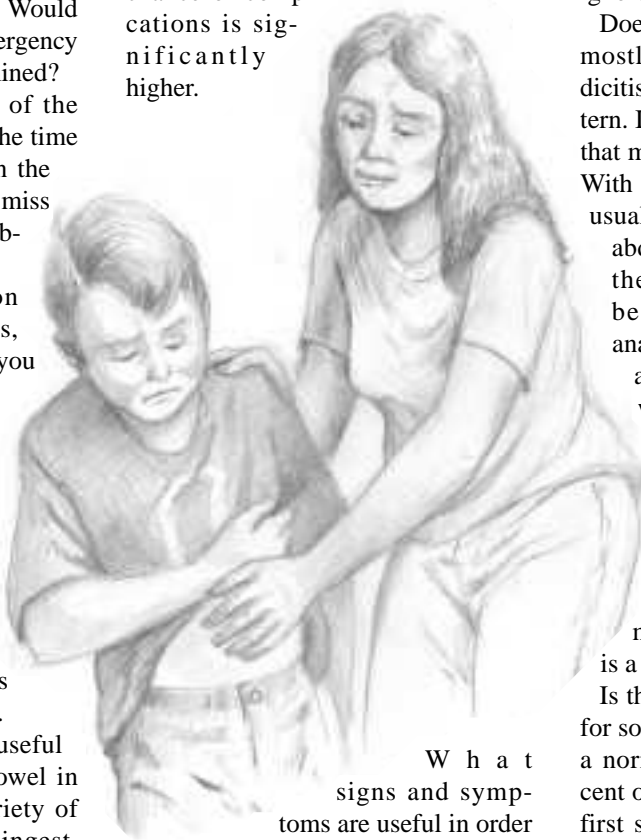
Insurance will cover most of the medical costs but what about the time lost waiting for the exam? On the other hand you don't want to miss appendicitis if that is the problem.

Tummy aches are common and most are not appendicitis, but how do you decide when you should worry?

Appendicitis is the most common acute surgical disease in the abdomen. Uncommon under five years of age, its incidence peaks in the second and third decades of life. From around age 15 to 25 boys are affected more than girls, but at other ages both sexes are affected equally.

The appendix is usually a useful structure which assists our bowel in defending itself from the variety of substances and bacteria we ingest. Unfortunately it can become obstructed from thickened stool particles, enlarged lymph nodes, or ingested items such as seeds or intestinal worms. Following blockage the appendix swells with fluid and trapped bacteria begin to multiply. The resulting infection causes more swelling and the stretched appendix begins causing abdominal pain. With typical progression the pain becomes worse, the appetite is disturbed, and low grade fever may appear.

Surgical removal of the appendix at this time is curative and rapidly returns a sick person to healthy status. Untreated the infection and increasing pressure cause the organ to leak and the person can become quite ill. Surgery and recovery become more difficult and the chance of complications is significantly higher.



What signs and symptoms are useful in order to avoid these complications?

From years of treating appendicitis I've found three questions that have proven to be very helpful in arousing my suspicions that someone has acute appendicitis.

How long has it hurt and is it getting worse? Appendicitis doesn't happen; it evolves. The abdominal pain frequently begins in an innocuous fashion and the patient often feels that he has the "flu." Over several hours (typically 4-8) the discomfort increases and may be felt more in one

part of the abdomen than others. The pain becomes more than an annoyance and frequently begins to interfere with activities such as play. Movement may cause an increase in the abdominal symptoms and sleep may be disturbed. The pain, initially a nuisance, now can no longer be ignored.

Does it hurt all over the abdomen or mostly in one place? Acute appendicitis tends to follow a common pattern. It is initially a diffuse discomfort that may center on the umbilical area. With time the pain increases and will usually localize to one place in the abdomen. This is most frequently the lower right side. However, because of variations in the anatomic position or length of the appendix, it can be almost anywhere. Other places where you might feel the pain include the lower left side, the back on the right or above the pubic bone. If you can gently push on your child's abdomen and one area hurts more than the rest, appendicitis is a concern.

Is the appetite normal? It is unusual for someone with appendicitis to have a normal appetite. For over 95 percent of patients, loss of appetite is the first symptom and pain occurs later. Vomiting happens three quarters of the time, usually after the abdominal pain has started. Most often it occurs once or twice. Diarrhea can happen; however, a more frequent complaint is the desire to pass gas or have a bowel movement. Unfortunately successful passage of either one doesn't relieve the increasing discomfort.

Diagnosing appendicitis is fairly easy if the appendix is located in the "usual" position. Unfortunately it frequently is not and acute appendicitis has been mistaken for many other ill-

nesses including abdominal flu, kidney stones, ovarian problems, and an inflamed colon. This is a particularly difficult problem in the very young and in older adults. Their bodies do not react quite the same and as a consequence, the rupture rate is typically 50 percent or more. Most older teens and adults have a more typical course but many times specialized testing such as a CT scan is needed to confirm the diagnosis and rule out other possible causes for the pain.

A ruptured appendix occurs when the pressure in the blocked appendix becomes so high that the circulation is disturbed and gangrene ensues. The appendix leaks pus and bacteria into the abdominal cavity. If the leaking appendix can be contained by the body and the infection controlled, recovery can occur on its own. However if the containment process is ineffective the pus spreads and the person becomes dramatically ill with abdominal pain, fever, chills, and dehydration. Treatment consists of removing the appendix, draining the pus, and using antibiotics to prevent further spread of the infection. The person is usually sick for quite awhile and recovery is slow.

A word about examining someone with abdominal pain. Perform your exam with the person laying down, preferably with their legs drawn up slightly to relax the abdominal muscles. Make sure that your hands are warm and that you push *gently* using the flat part of your hand, not your fingertips. Don't prolong the exam. If it hurts, try to get an idea where it is localized and then quit. Their belly hurts enough; don't make it worse.

If the initial symptoms don't suggest appendicitis I would recommend keeping the person on clear liquids for a few hours. These are essentially flavored water and are represented by jello, broth, clear fruit juice, and sodas. Given frequently, in small amounts, they help prevent dehydration which will make any illness feel worse. From a surgeon's perspective

they keep the stomach free of solid food in the event that an operation is necessary.

Acetaminophen (Tylenol) or ibuprofen can be given to relieve discomfort. A few hours of observation should help you determine if the symptoms change and suggest that appendicitis is a possibility.

If it is Saturday afternoon and your child is complaining, remember the following guidelines. If they have (a) a history of abdominal pain which is getting worse, (b) pain which is localized to one particular area of the abdomen, and (c) an appetite disturbance, particularly loss of appetite, appendicitis is a real possibility and further evaluation is indicated. A professional physical exam accompanied by a determination of the white blood count and urine exam should help to confirm or deny your concern. If the diagnosis is difficult, expect that further tests may be done including a CT scan or other specialized studies. Δ

FOUR YEARS OF BHM ON CD-ROM



**ONLY
\$15.95**
(regularly
\$39.95)

1497 pages of searchable self-reliance information on one easy-to-use CD-ROM. Just put it into your CD-ROM drive and it's ready to go. Hundreds of articles on energy, building, growing & storing food, animals, self-reliance, country living, cooking, making money, etc.

800-835-2418

Or send payment to:
Backwoods Home Magazine
P.O. Box 712, Gold Beach, OR 97444

Show your colors with a BHM t-shirt!



Only the best quality! Shirts are 100% pre-shrunk cotton. Only \$15.95 ea. Call 800-835-2418 to order, or use the order form on page 89.

New BHM t-shirts!



\$15.95 ea. To order see page 89 or call 800-835-2418.

Supercharge your AM radio

By Charles A. Sanders

Do you live so far up the holler that you have to have sunlight piped in? Are you so far out in the sticks that it's a two-day trip to go to town? This project may be just for you.

Do you enjoy tuning the radio dial searching for something other than the local programming? Do you like DX'ing—trying to pull in distant radio stations? This device will help.

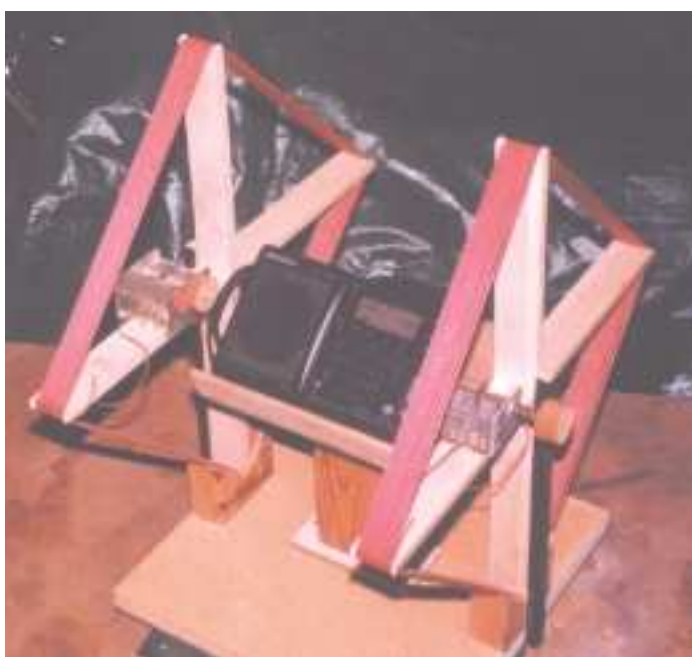
Even in these days of high technology, there is still a certain attraction to cruising up and down the radio dial as a way to gain information and entertainment that might otherwise be missed. There are times that you may wish to pull in a distant station out of the many stations you can hear. On the other hand, you may live far enough out in the boonies that you have a hard time picking up a good signal from just about any station.

In this article, I will describe a way to "supercharge" your ordinary AM broadcast band (BCB) radio. The device described here can be built with little outlay of cash, from mostly scrap materials (if you are a good scrounger) and with a minimum of workbench expertise. The results you achieve will surprise you. This little workshop wonder is called a passive loop antenna.

There are manufactured passive loop antennas available on the market today. They will do a good job for you. But unless you want to shell out

the \$60 to \$400 for one of them, you might want to give this home-brew version a try.

I designed my own loop antenna and some of its measurements around my own radio, a Grundig Yachtboy 400. This little radio has great short-wave and FM reception. For this project, however, I will describe how to enhance the already good AM recep-



*A view of a completed passive loop antenna and turntable.
The radio is a Grundig YB-400.*

tion capabilities for this and other similar radios. Good models to consider for the project include the YB 400 mentioned above, the GE Super Radio III, the C. Crane CCRadio, and just about any of the other smaller portable radios. No matter what AM portable radio you use, you will see surprisingly good increases in reception.

Before we really get into the project, let's take a quick look at how AM radios receive their signals. The best type of antenna to use for BCB recep-

tion is called a loop antenna. AM radios generally utilize an antenna based upon—or actually around—a ferrite rod. Ferrite is a magnetic material and is commonly used for this purpose. A ferrite rod about pencil-size in diameter is a common size. I have also seen ferrite rods in the flatter shape much like a carpenter's pencil. In any case, once the rod has been shaped to size, it has a long length of wire wrapped around it, creating the loop antenna. One of the distinct and obvious advantages to this type of antenna is that it compresses the large length of wire of the loop antenna into a compact size. It can then be placed right inside the body or cabinet of the radio. An added benefit is that this type of antenna becomes highly directional and can be pointed more towards a station you are wanting to hear and away from interfering stations to help quiet them. Perhaps you can recall this effect when listening to a portable radio. Turning the radio itself caused a station to be heard more clearly or

decreased the interference of a competing station.

On the downside, these types of antennas are very broad in their tuning so that they can cover the whole broadcast band. The project described below will actually aid the existing ferrite rod antenna by tweaking and peaking its response at certain frequencies.

What it does

When the antenna is placed alongside your radio and the tuning capaci-

tor is tuned, a magnetic field is created that is coupled to the ferrite loop in the radio.

This simple design utilizes a very basic radio circuit made up of a loop of wire and an old tuning capacitor. As you can see from the photograph, these components are mounted on simple wooden cross members.

A vital part of the passive loop antenna is a variable capacitor. Without getting into a bunch of technical jargon, I will state that the component is a 365 pico-farad variable tuning capacitor. If you decide to purchase the piece new, this information will help you get the right one.

Otherwise, you can do as I did and scrounge the tuner from an old defunct AM radio. You can also pick them up used for a few dollars at a ham radio fest, flea market, or radio shop.

Building the loop antenna

The first thing needed is to make the cross members. I used wooden slats about 1/4-inch by 1 1/2-inch by 18 inches long. I cut a 1/4-inch slot in each piece half way through at a point half their length. This enabled the two pieces to slide together in an "X" or cross shape (See Figure 1). Note too,

that on each end of slats, I cut an indentation so that "ears" remained on the outer edges of the cut. They will help to hold the wire in place as you wrap it around the cross member frame.

I slipped the two pieces together and formed an "X," gluing them with wood glue and assuring that they were at 90-degree angles by using my square and a couple of clamps.

Once the cross arms are dried, it is time to add the wire. You will need to use about 65 feet of #22-gauge wire wrapped around the cross members. The ends of the wire will be attached to the 365-pf tuning capacitor.

I then drilled two small holes in one

of the arms. The diameter of the holes was slightly larger than the 22-gauge wire and are used to provide an anchor point for the wire.

Next, wrap approximately 16 turns of the wire around the frame, being sure to keep it taut around the framework. Leave 6 or 8 inches of wire on each end to extend to the tuning capacitor. Run each wire through one of the two holes you drilled in the frame arm.

Next, add the tuning capacitor to the antenna. If the tuning capacitor has screw holes in the base, attach it with them. If it does not, it can be easily attached to the arm by using common epoxy glue. After allowing the epoxy to completely dry (24 hours) solder the two wires to the capacitor. Attach one of the wires to a lug on the stationary plates of the capacitor, and the other to the lug of the rotating plates. Add a knob to the rotor shaft of the capacitor. If the capacitor does not have one, you might pick one up at an electronics supply store, or you may fashion one from a wooden toy wheel or make one from a piece of wooden closet rod, as I did.

I mounted the loop to the base by first cutting a wood strip long enough to run from the center of the cross arms to about 2 inches past the end of the arm. I attached it to one of the arms using wood glue, clamped it in place and allowed it to dry. I cut a notched block, using the angle of the wired frame as a template. I set the loop into the notch and glued the wood strip onto the block. Looking at the photograph, you can see the dark brown wood strip. It runs from the center of the loop antenna, down along the arm and is secured to the notched block and base. It is illustrated in Figure 2 as 6a and 6b.

Since I made two of the loops, I made sure to allow enough space for my radio to sit between them. Then I mounted them to the blocks and the base. I also added a simple wooden

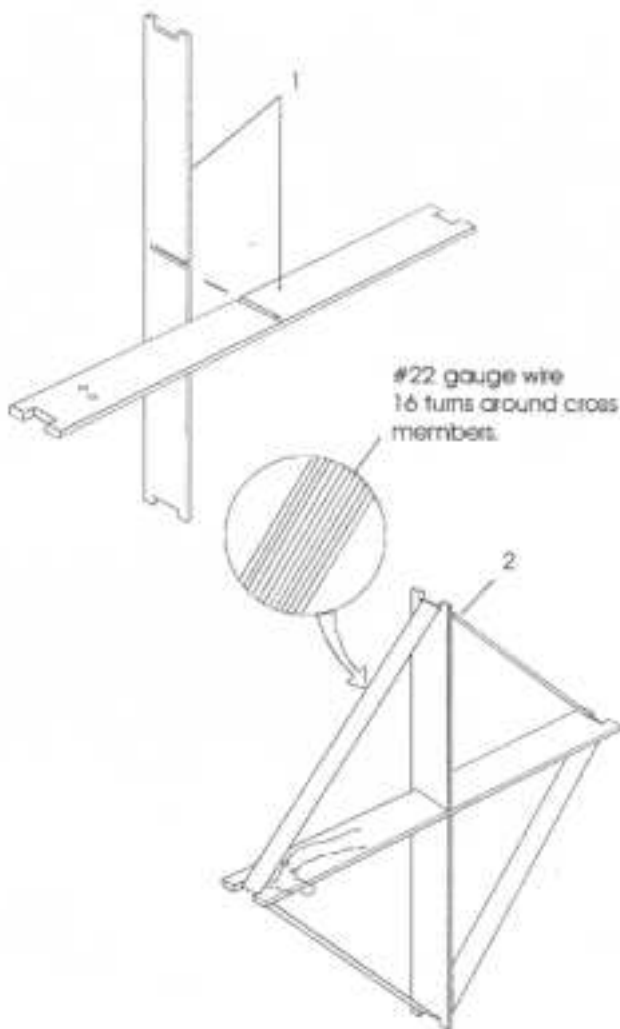


Figure 1. Two wooden slats are slotted and fit together to form the cross arms (1), then #22-gauge wire is wrapped around them 16 turns to form the loop (2).

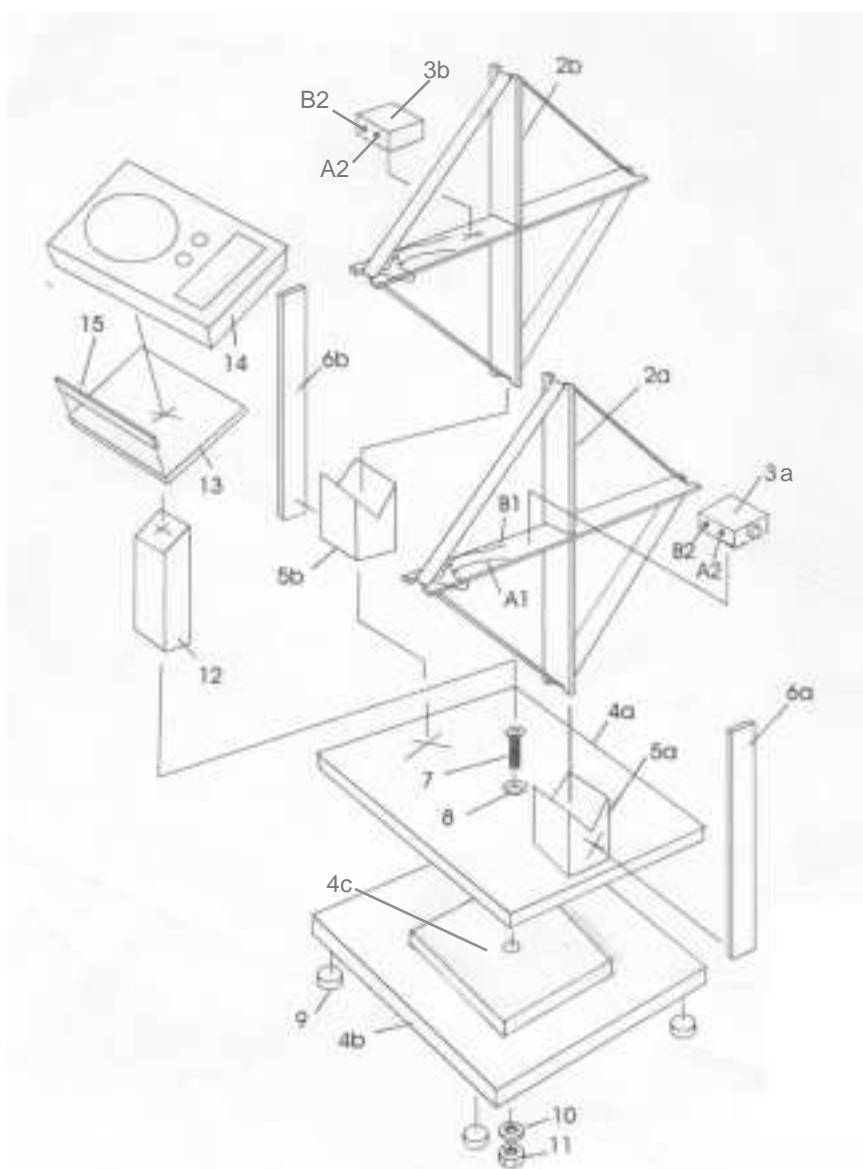


Figure 2. Assembly of the antenna

pedestal to hold the radio neatly centered along the axis between the loops.

Testing the loop

To test your completed loop, simply set it alongside your radio. Turn the radio on and tune in a station towards the low end of the dial (around 550 kHz). Tune the loop's capacitor knob until you hear a change in the quality of the signal you are hearing. Now do the same using a station up towards the high end of the dial. You should

again hear a change in the strength of the signal you are hearing. These changes in signal strength indicate that the loop is working properly.

The turntable

Now that you have the antenna itself constructed, I'll refer back to the fact that the AM antenna is very directional. All that means is that by turning the radio (and its antenna) towards or away from an AM signal, you will improve or degrade the signal you are receiving.

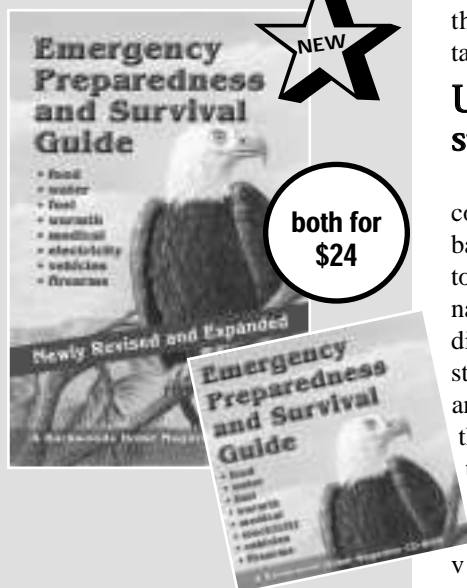
- 2a. Loop
- 2b. Opposite loop
- 3a. 365-pf tuning capacitor
- 3b. opposite tuning capacitor
- 4a. Loop platform
- 4b. Base platform
- 4c. Turntable mechanism (Lazy Susan)
- 5a. Loop base block
- 5b. Opposite base block
- 6a. Wood strip (glue 5a and 2a).
- 6b. Wood strip (glue 5b and 2b).
- 7. Flathead screw (counter-sunk) into 4a so pedestal (12) can be glued over top of screw (7), flush on the loop platform
- 8. Countersunk hole drilled into loop platform (4a) and through base (4b)
- 9. Rubber feet (four required)
- 10. Washer
- 11. Nut to secure 4a, 4b, and 4c
- 12. Post pedestal
- 13. Shelf for radio
- 14. Radio
- 15. Wood lip glued to 13 to keep radio in place.

Wire ends A1 and B1 of their respective loops (2a and 2b) to be soldered to lugs A2 and B2 on capacitors 3a and 3b.

This principle comes in handy when using this loop antenna. By turning the antenna towards the signal, we can greatly improve the reception. By turning it away from an interfering station, we can decrease or "null" the signal almost completely.

A very simple way to do this is to use an ordinary "lazy susan" such as those used in cabinetwork. These are available at many hardware stores, by mail order, or via internet from sources listed below. I have also seen tough plastic ones that should work

hope for the best plan for the worst



The Book

- 300 pages of practical preparedness information.
- The best of 14 years of BHM expertise.
- Comprehensive, accurate, and exciting to read.
- This is an exhaustive analysis of what needs to be done and how to do it.

\$15.95 + \$3 S&H

The CD-ROM

- Even more comprehensive than the book. Dozens of articles comprising hundreds of pages. A preparedness library on CD-ROM.

\$9.95 + \$3 S&H

800-835-2418

Backwoods Home Magazine
P.O. Box 712, Gold Beach, OR 97444
Order on page 89.

well. One that is 6-8 inches in diameter will work very well.

Since you have the antenna mounted onto a solid base already, all that is needed is to attach the 'lazy susan' to the antenna base, and finally to the turntable base using glue or screws. To the bottom of the turntable I added some rubber 'feet' that I scrounged off of an old blender. This added some stability and kept the whole thing from scooting around on the table when using it.

Using your new super antenna

Now that you have your antenna completed and mounted on a swivel base, set the radio in place and begin to learn to use the passive loop antenna. Turn the radio on and adjust the dial to a familiar, reasonably strong station. Rotate the radio and antenna and listen for the station to 'peak' as the radio is turned to the best position. Now, turn the knob on the variable capacitor and you should notice a distinct increase in the reception level. If you have a double antenna as I constructed, tune the adjacent capacitor. Rotate the whole assembly and tweak the capacitors until you get the best signal you can.

Spend some time using the loop antenna to learn how to get the best

Some interesting Internet sites related to AM radio monitoring:

Funkenhauser's WHAMLOG and Mediumwave DX Radio Links -
<http://www.home.inforamp.net/~funk/>

The AM and FM DX'ers Resource -
<http://www.amfmdx.net/>

Dxing.com -
<http://www.dxing.com/amband.htm>

results from it. There will be some variation in your results depending upon your location. Remember this: the time of day and the season of the year have great effects upon radio reception. Many of the distant AM stations will be most audible late at night. Winter is often a better time to do a lot of listening for distant stations. In fact, a cold winter evening is a great time to sit down with a hot mug of tea and try to tune in some of those far away stations. Good luck and happy DX'ing. Δ

QUIT DREAMING...

You see it in your dreams — that beautiful log cabin in the mountains. Now it's time to turn it into reality with the help of your very own Wood-Mizer portable sawmill.

Many of the 30,000 Wood-Mizer owners, like Joe Bonn, have used their mills to cut lumber for their dream home. They even use the mill to cut the lumber used for wood flooring, beams, and rafters.

You won't get the same quality lumber at the lumberyard. With a Wood-Mizer sawmill, you'll have the only tool you need to cut true dimensional lumber for your log or timber-frame home.

With mills covering a wide range of production levels, you determine the pace at which you'd like to work.

Do the math. We think you'll find that the cost of your mill is quickly recovered, and then you can continue making money with it long after you're settled into your new home.

Bring your dream home to life.

1.800.553.0182
www.woodmizer.com

TRUST.
Wood-Mizer®

BHM7006

Tomato canning tips

By Tom R. Kovach

When it comes to canning tomatoes, the USDA advises to increase both the acidity and processing time that was formerly recommended. The reason: today's fleshier tomatoes require these changes in ensuring a safe product.

Begin the process of canning by filling a boiling water bath canner half full of water. Place it on the stove and heat. Have enough quart-sized canning jars to fill the canner rack and wash the cans with hot, soapy water. Rinse well and place them in the canner until needed. Also wash the canning jar lids and bands and rinse well. Put these closures in a saucepan, adding water and bringing to a simmer. Remove the pan from the heat, leaving the closures in the hot water.

Make sure you choose tomatoes that are red-ripe, firm, and free of blemishes. Rinse and drain them. Put the tomatoes in a wire basket and lower them into a large sauce pot of boiling water. Blanch for 30 seconds or until the skins begin to crack. Remove and submerge the tomatoes into cold water.

Now core the tomatoes and peel them. The tomatoes can be left whole or cut in half. Put them in a large sauce pot with water to cover. Bring the water to a boil, then reduce heat and boil for 5 minutes.

Remove one jar at a time from the canner. Place 2 tablespoons of lemon juice or ½ teaspoon of citric acid in

the jar (sugar can be added to offset the acid taste).

Using a canning funnel, add the hot tomatoes to the jar, leaving a ½-inch space at the top. Ladle the hot cooking liquid over the tomatoes, again leaving ½-inch of space. One teaspoon of canning or coarse salt may be added, if desired.

Run a nonmetallic spatula between the tomatoes and jar to release any trapped air bubbles. Wipe the jar threads with a clean, damp cloth.

Using tongs, remove a lid from the saucepan and place it flat on top, with the sealing compound against the jar. Add the band and screw it down firmly.

Stand the filled jars back in the canner. When all the jars are filled, check that there are 2 inches of water over the jars and at least 2 more inches of head space in the canner above the water level. Cover the canner and bring the water to a boil. Begin counting the processing time when the water boils.

Process 45 minutes at a gentle but steady boil.

Remove the jars from the canner and put them on a wooden or cloth surface, several inches apart and away from drafts.

Let the jars cool 12 hours, then remove the bands and test the seals. Properly sealed jars should be stored in a dark, dry, cool area and should be used within one year. If jars don't seal properly, reprocess with new seals, or refrigerate and use within a few days. Δ



The new BHM 2002 CD-ROM



Get the latest and greatest.
All articles from the past year
on one CD-ROM.
Only \$12.95

www.backwoodshome.com
1-800-835-2418
Order info on page 89.

SPROUTLADY'S ORGANIC SEEDS PLAN AND STOCK-UP

Grow your own fresh sprouts all year long
Easy to do and no soil!!
Non-electric Sprouters



SPROUTHOUSE

The source for Beginners and Volume Sprouters
30 Delicious Varieties of organic seeds including
wheatgrass, recipe books and juicers
Bulk seed discounts available
Call today for your **NEW FREE 2003** catalog.

1-800-SPROUTS

www.sprouthouse.com

Free seeds with internet order

SPROUTING FOR LIFE

CHAPTER 4:

THE LAST RIDE OF 'YO ROLLER

This is the third installment of Robert A. Waters' *Guns Save Lives*. The first installment appeared in the March/April 2003 issue of *BHM*. Future issues of *BHM* will contain some other chapters of Waters' book.

By Robert Waters

"I still carry concealed, which doesn't make going to work an event I look forward to each morning."
— Dennis Grehl, July 17, 2000

The door opened, kicking a brief blast of frosty air into Redford Pharmacy. A young man entered, his sneakers tracking crusts of ice across the floor.

It was Saturday afternoon, January 18, 1997. Just another day in another Detroit ghetto.

Jennifer Knott stood at the counter. When the man had appeared at the door, she'd clicked a buzzer to allow him to enter.

Pharmacist Dennis Grehl was at the other end of the counter. He was talking on the telephone. Grehl had worked at the drug store for 35 years. In 1961, while still a teenager, he'd begun as a courier, delivering prescriptions to the store's customers. He later interrupted his employment to serve in the U.S. Army, then completed his degree at Ferris State University. In 1968 he came back to Redford to stay.

Grehl had seen the area change. What had once been a mixed-race, middle-class neighborhood in which residents waved and spoke to one

another had become a menacing slum. Crack addicts and prostitutes openly hustled on the streets outside, and nearly every business on the block had been robbed at least once.

An experience that had occurred in 1990 had profoundly affected Grehl.

He'd been robbed.

Because of this, Grehl had begun carrying a gun, a .32-caliber Beretta semiautomatic that he kept in a holster behind his back.

"I have a permit to carry a concealed handgun," he recently wrote to the author. "[That's] not an easy thing to get in this area. But I had received formal firearms training in the military, so I was proficient with handguns."

The customer who had entered the store wore a green jacket and blue jeans. Knott noted that he appeared clean-cut, thin, and handsome. But when he stepped up to the counter, he snapped, "Gimme the money, bitch!"

At first, the clerk thought he was joking. She wasn't even nervous until the customer opened his jacket. There, tucked into his trousers, she saw the butt of a revolver.

Grehl was still on the phone. He hadn't noticed that the store was being robbed.

The robber motioned toward the cash register.

Knott tapped out the entry code. The cash drawer popped open and she began scooping out bills. Keeping her composure, Knott purposely let several flutter to the floor. She hoped Grehl would notice.

He did. The pharmacist glanced at her, but was still unaware that the man standing four feet away was anything other than a customer.

Then the bandit reached over the counter, snatched the money, and shouted, "I'll take that and a lot more, bitch!"

It suddenly hit Grehl like a flashback. We're being robbed again, he thought. He remembered the robbery in 1990 when he'd been forced to the floor by two gunmen. The amount of money they got, about \$900, didn't matter. But the vulnerability he'd felt, the total loss of control, the fact that his life might end just so some crackhead could get another hit—he had been so enraged that he swore it would never happen again.

At that moment, the robber glanced at the pharmacist. For a moment, their eyes locked. It was then that Grehl determined to stop the man. He reached behind his back for his gun. At the same moment the robber reached out his own gun. It was like a quick-draw movie straight out of Dodge City.

Grehl won. He yanked the .32 from his holster, raised his arm, and aimed. The robber's gun was in his hand and he was swinging it toward Grehl when the pharmacist fired. The crack of the gunshot echoed through the little store, followed by a surreal silence.

The robber slumped to the floor, kicked once or twice, then lay motionless. A stream of blood oozed down his face. The pharmacist's shot

had struck the bandit in the middle of the forehead.

In the silence, the air smelled like gunpowder. The two store employees looked at each other, then glanced down again at the robber. The pharmacist wanted to retch. Then he placed his gun on the counter and waited as Knott called police.

Anthony Williams had been preparing for his own funeral all his life. He may not have known it, but his lifestyle dictated that he would die young.

He was one of seven children. Although the family lived in a housing project in Chicago, his mother worked hard to support the family.

Williams got into trouble early and often. At 14, he was suspected of murdering his best friend. But the police were unable to prove it, and the charges were eventually dropped. Two years later, he dropped out of school. Another year passed before he left Chicago a step ahead of the law. He moved from one ghetto to another, this one in Detroit.

Some women found him attractive, and he quickly learned how to charm them. He sired five children by three different women, and he always kept a few girlfriends on the side. But he never married any of them.

By 17, he was a full-fledged drug pusher. He had all the accouterments of the trade: big cars, heavy gold chains, and women.

Williams went by the street name "Yo Roller." To local gangs, the name meant "rolling to another heist."

Eventually, though, Williams fell prey to the drug dealers' trap—he began using the stuff he sold. He could handle marijuana, mescaline, even heroin, all staples of his business.

But crack cocaine was another story. He quickly became addicted to the drug. Now the women could come and go, but a baggie was always his constant companion. At

36, Williams still had his looks and trim physique. But those who studied him closely could see the frantic eyes of a crackhead.

'Yo Roller was always armed. Unlike Grehl, however, he didn't bother to get a permit. And his gun dealer didn't have a license—Williams bought his guns on the street, or he stole them.

At least once a day, the crackhead put his gun in his pocket and hit the streets searching for another mark. But no matter how much he stole, there was never enough money to support his habit.

*She wasn't even nervous
until the customer opened
his jacket. There, tucked into
his trousers, she saw the butt
of a revolver.*

In 1986, Williams was arrested for illegal use of a firearm. The charges were later dropped. In 1988, cops stopped him for speeding and found 17 packages of crack cocaine in his clothing. He pled guilty, but was given probation. In 1991, he was again arrested for possession, but he walked again.

As happens so many times with violent criminals, Williams would never serve a day in prison.

By the time he decided to rob Redford Pharmacy, 'Yo Roller had become a shadow on the dark streets. He came and went, making nightly trips to the crack house to pick up his next hit. His business had dried up, because now he smoked everything he could get. Each day he needed more, and still he couldn't get enough.

On that cold, snowy afternoon, Williams was desperate. He needed some blow, and he needed it quick. 'Yo Roller was prepared to murder someone to get it.

Police arrived within minutes after the shooting. They escorted Jennifer Knott and Grehl to the police station. Investigators questioned the employees for an hour, then released them.

On Monday, the Wayne County district attorney called Grehl to inform him that he wouldn't be charged. The shooting had been ruled a justifiable homicide.

In a recent letter to the author, Grehl reflected on his feelings about the first robbery when he was forced to lie on the floor with a gun to his head. "That's a position you don't want to be in," he wrote. "It's absolute, complete helplessness. You're not sure if they're going to eliminate witnesses."

After the 1990 robbery, the company installed a buzzer system to screen customers before letting them come into the store. They also installed a panic button, and forbade employees from working alone. And in an unusual policy decision, the company owner authorized Grehl to carry a firearm on the premises.

Jennifer Knott credits Grehl with saving her life. "I thought my life was going to be over," she said. "Flash—right in front of my own eyes."

In the last few years, Grehl has seen his neighborhood deteriorate even more. Now steel bars cover all windows and doors of the few businesses that remain.

Employees no longer live in the area. Instead, they slink in from the suburbs, put in their eight hours, then flee, thankful to have survived another day.

Grehl plans to work for two more years, then retire to Florida.

He looks on what he did as something that was necessary. But it still haunts him. "I can't say I'm glad I did it," he said. "But I'm glad it didn't turn out the way it could have. To this date, I still don't always sleep well at night." He paused, then added, "But at least I survived." Δ

Ayoob on Firearms

Shooting left-handed

In the Letters page of the January/February 2003 issue of *Backwoods Home Magazine*, Denton Warn writes, “Mr. Ayoob’s four-page advertisement for the Glock pistol leaves out one important point. I have handled Glocks at gunshows, and found that they are unsuitable for left-handed use. Ten percent of the population is left-handed, and there are occasions when a right-handed shooter may have to fire with the left hand. There are very few autopistols suitable for left-handed use and almost none of significant caliber have a grip comfortable for smaller hands. Fortunately, I can use my right hand pretty well, so if I felt the need to carry an autopistol, I could get by. Till then, I’ll stick with revolvers.”

Cousin Warn, I feel your pain. Seriously. I’ve been teaching left-handed people to shoot for more than 30 years now, and a couple of weeks a year I carry, qualify, and compete left-handed to stay sharp for teaching that segment of my students, which by the way tends to run a little higher than 10 percent. As you insightfully noted, any right-handed shooter may suffer an injury that forces them to become a temporary southpaw, and that makes the topic of left-handed shooting a worthwhile one for any gun owner.

Semiautomatic pistols

Since semiautomatic pistols in general and the Glock in particular were the focus of reader Warn’s letter, we’ll start there. The “autopistols are made for right-handers” thing goes back to the first 60 years of the 20th

Century, in which such classic pistols as the Luger of 1908, the Browning-designed Colt of 1911, the Walther double action beginning in the late 20s, the Browning Hi-Power of 1935, and the Smith & Wesson Model 39 of 1954 all had their safety or safety-decocking levers mounted on the left side of the gun to be accessible to the thumb of a right-handed shooter. Not until the 1960s did we see the ambidextrous manual safety for the 1911 pistol, pioneered by the great gunsmith Armand Swenson, come to the public’s awareness. Smith & Wesson had gone through four-fifths of the 20th Century before they produced a semiautomatic pistol with an ambidextrous safety/decocking lever.

Today, the ambidextrous “fire control system” is commonly available, either standard issue or as an option at slightly extra cost. Moreover, we have a generation of “KISS Principle” (Keep It Simple, Stupid) auto pistols, with double action only firing mechanisms and “slick slides” devoid of safety catches or decocking levers. These are truly ambidextrous. The Glock is a classic example of this.

Each of these guns comes from the box with the slide-lock lever and the magazine release situated on the left side of the frame, positioned for a “righty” to manipulate with the right thumb. Does this mean they are unsuitable for left-handers? No! It only means that the southpaw needs to do what he or she has been doing all their life, and cleverly adapt to a right-handed world.

Instead of hitting the magazine release button with the left thumb, the



Massad Ayoob

southpaw’s dominant hand is now positioned to come back and hit it with the index finger. This generally requires less of a shift of the hand on the gun than does the thumb-manipulation when done by a right-hander as the guns’ designers intended. It is actually faster for the lefty! If the release button is located at an angle where your particular index finger doesn’t reach it naturally when firing left-handed, use the middle finger instead.

The slide-lock lever can also be faster for the southpaw. Many righties have thumbs too short to reach that lever mounted on the left side of the gun without shifting their hands, and have to use the left hand to do it. But the lefty has three strong options for releasing the slide-lock lever to complete a speed reload.

The southpaw can use the left index finger to release the lever on every



This shooter has no problem expertly manipulating a .45 caliber SIG P220 left-handed.

such gun but the SIG, where the lever is located too far back to allow that. This is the high-speed technique that southpaw Bob Houzenga has used to win six national champion titles in practical handgun shooting. The lefty can do what I do when shooting with that hand, and use the fingertips of the right hand in a karate “spear hand” movement to reach up and pull down the lever after the palm has slapped the fresh magazine into place. The magazine insertion movement positions the support hand ideally for this maneuver. Finally, the left-handed shooter can simply use the whole (right) support hand to tug the slide to the rear to release it from the locked position. While slower than using the release lever, this is widely taught to right- and left-handed shooters alike as a gross motor skill that will better survive loss of dexterity under stress, and is thus truly ambidextrous.

There are certain semiautomatic pistols, the Beretta and the SIG-Sauer to name two, which in several models have an interchangeable magazine release button that can be swapped to the right side of the gun to put them in reach of the southpaw’s left thumb. However, I truly believe that they are slower than using the first two techniques described above. This is why some of the right-handed handgun cognoscenti switch their Beretta and

SIG mag release buttons to the right side of the frame. They can now use their trigger fingers to dump the magazine instead of their thumbs, and thus share the speed advantage the lefty already has with the standard pistol!

The aforementioned southpaw champion Houzenga carries

a .40 caliber Glock 23 on duty as a chief of police. He does not feel handicapped by his choice of gun. Neither does left-handed gun expert Mike Boyle, who wears a .357 caliber Glock at work every day.

Double action revolvers

Reader Warn follows a long line of left-hand-dominant handgunners who found the revolver more ambidextrous in shooting. It certainly is that. I suspect he has already discovered that the double action revolver with swing-out cylinder is actually faster to reload for the southpaw than it is for the righty. The reason is, revolver cylinders all swing out to the left, and once the cylinder is open it is presented directly to the left hand. The southpaw can hold the open revolver in the right hand and use the more dextrous fingers of his left hand to insert the cartridges directly from belt pouch or pocket to the loading chambers. The righty, by contrast, must reach up and over the

whole gun to get at the cylinder with his dominant hand.

It frustrated me back in the early ‘70s to see police instructors teach left handed officers to change hands and do a right-handed reload of the service revolver, because they didn’t know any other way to do it. The southpaw should be able to reload a revolver faster than a righty of equal dexterity. The key is in knowing how to open the cylinder. Instead of changing hands, simply bring the left thumb up over the hammer area to the cylinder release latch and then thrust the thumb forward, while the thumb of the right hand pushes the cylinder out of the left side of the frame. Then use the left hand, which is ideally placed for the task at this moment, to palm-slap the ejector rod and punch the spent casings out and clear. Now the southpaw’s dextrous left hand can grab the speedloader or the loose cartridges and feed the fresh rounds into the cylinder. When this is done, the fingertips of the right hand will be ideally placed to close the cylinder as the left hand returns to a firing grasp on the grip frame.

One small point: you want to use the left thumb to push the cylinder latch forward for release on the Smith & Wesson, the Taurus, and the Rossi, and to punch the latch straight inward toward the frame on the Ruger. If you



This Kimber Team Match .45 auto has an ambidextrous safety, placed for a southpaw’s thumb at the right rear of the frame.

have a Colt revolver, whose latch moves backward to release, it will be faster—indeed, amazingly fast—for the southpaw to use the tip of the left index finger to draw the latch rearward. This requires much less movement of the hand, creating the speed advantage. The Colt is the fastest-opening double action revolver a southpaw can use.

Single action revolvers

All single action revolvers are characterized by the need to thumb the hammer back to full-cock position before the trigger can be successfully pulled to fire a shot. In this respect they are totally ambidextrous. Most follow the pattern of the Colt Model P (Single Action Army, or “Peacemaker,” model of 1873) in that they must be unloaded of empty shell casings and reloaded with live cartridges one round at a time, through a loading gate located at the right rear of the cylinder on the revolver’s frame.

Gun experts for many decades have theorized that Samuel Colt must have been left-handed to design the “Peacemaker” this way. The southpaw shooter’s thumb is ideally positioned to flip open the loading gate of this revolver, or the Ruger Single Six or Blackhawk or whichever of the countless clones of that popular handgun that have followed. As a competitor in the popular “Cowboy Action” shooting sport, I can tell you that on the rare occasions when the course of fire requires us to reload a single action revolver, I have learned that the fastest way I can do it is to switch the sixgun to my left hand and handle the task like a southpaw.

Shotguns

For more than a century, “hammerless” double barrel shotguns—whether the barrels were arrayed “side by side” or “stacked” to “over and under” positions—have had the most ergonomic of safety catches.

Located on the tang (the portion of the frame or receiver that extends into the butt stock), this lever is simply pushed forward when you want to fire and kept in the rearward position when you want the gun to be “on safe.” An identical system has been seen on most “hammerless” single barrel/single shot scatterguns.

Most slide action and semiautomatic shotguns that use a cross-bolt manual safety (that is, a push-button mounted at the trigger guard area) can be reversed for left-handed use or ordered from the factory as a brand-new “southpaw shotgun.” The lefty who has to use such a gun borrowed from a right hander can adapt simply enough by taking a firing hold on the gun, and reaching the left middle finger under the trigger guard, pushing the button to the left. This will release the cross-bolt safety to the “fire” position. A press to the right with the left index finger (trigger finger) will “on safe” the gun again. When the gun is set up for your dominant hand, of course, it will be more efficient to use the index finger to press the crossbolt safety laterally to the “fire” position, and the middle finger to reach to the opposite side to push it back to the “safe” condition.

A handful of pump and auto shotguns, notably the Mossberg brand, use a sliding safety on the rear of the rifle. Adapted from earlier double barrel shotguns, the sliding safety is operated by the thumb: forward is “fire,” and back is “safe.” This is the most ergonomic of safety catches. It has been adapted to such bolt action rifles as the Savage Model 110 and the early production versions of the Ruger Model 77, and is seen today on



Southpaws are among our most successful shooters. This is Jaskiel McDowell, 12, National Junior Handgun Champion in Sub-Junior class. A lefty, he won with this .22 caliber SIG/Hammerli Trailside .22 auto pistol.

the sophisticated Steyr-Mannlicher. There is simply no manual safety for a bolt action rifle that is more ambidextrous than this type.

Old-fashioned double barrel shotguns with exposed hammers are making a comeback among those gun buyers who tend toward nostalgia, and exposed hammer single shot/single barrel shotguns which must be thumb-cocked to fire are totally ambidextrous in function. The shooter simply needs to know that whichever hand is performing the manipulation, the lever that opens the action needs to be pushed to the right.

Rifles

Rifles tend to be single shot, lever action, bolt action, slide action, or semiautomatic in design. Let’s take them one by one.

Single Shot rifles which have exposed hammers are totally ambidextrous. So are traditional style hammerless single shot rifles such as the Ruger.

Lever action rifles are for the most part ambidextrous. The Winchester

94 and Marlin 336 are the most common paradigm. They have outside hammers that must be either thumb-cocked if there is a round in the chamber, or levered with the whole hand to get a round into the chamber of a gun carried with only the magazine loaded with cartridges. Many experts now believe these rifles were originally intended to be carried with loaded magazines but empty chambers. The most recent versions have frame-mounted cross-bolt safeties which go across the firing pin area. Whether you are a righty or a lefty will determine whether you off-safe with your index finger and on-safe with your thumb, or vice versa. In either case, it is the shooter's responsibility to familiarize himself with the "manual of arms," that is, the proto-



(1st of 2) Right hand holster confirms that Police Chief Russ Lary isn't a southpaw, but like all his officers he stays in practice shooting lefty, both two-handed as shown...

cols of properly manipulating the firearm.

One famous southpaw shooter who favored the lever action, at least early in his career, was Charles Askins, Jr. Whether he was hunting animals or hunting men as a Border Patrolman, he was partial to the Savage Model 99 lever action rifle, and found that in caliber .250 Savage it was quite effective at killing man-size creatures.

For most of the 20th Century, the hunter who fired a rifle from the left shoulder and wanted a bolt action either had to pay big bucks to a custom gunsmith for a left-hand conversion, or go through some pretty awkward gyrations to get the next cartridge into the firing chamber. Savage was the first company to offer a factory-produced left-handed bolt action rifle, way back when cars had tailfins. The Savage was followed by Weatherby, Remington, and the other big makers, and today it's no problem for the left-handed shooter to find a "mirror image" bolt action rifle.

The slide action rifle, if you're buying a new gun today, is typified by the Remington 7600 series. Its crossbolt safety is "switch-

able" to southpaw configuration. Everything else is "even Steven" as far as workability between righties and lefties.

The semiautomatic rifle covers a broader range of manipulation options. Rifles like the popular Remington 7400 can be had in left-handed models. Some auto rifles, the M1 Garand, the M14 and its civilian clone, the Springfield Armory M1A, and the Ruger Mini-14 and Mini-30, have push/pull safety levers at the front of their trigger guards. Forward is "fire," back is "safe." The Garand, the M14, and the M1A place that lever in a cut in the front center of the trigger guard, making the operation truly ambidextrous. On the Ruger rifle, the lever is located at the left front of the guard. This makes the device actually easier to operate for the shooter who fires from the left shoulder.

The M16/AR15 type rifle is probably the most popular today for home defense and "action shooting" competition. In its original form, the fire control lever was situated on the left side of the frame to be accessible to the right thumb when the right hand was on the pistol grip and controlling the rifle's trigger. Many guns of this type today have mirror image "ambidextrous" fire control levers. If you are a lefty and you have an AR with only the right-hand lever, don't despair. Simply learn to keep your left thumb to the left side of the pistol grip as you fire the gun. There is no



(2nd of 2) ... and left hand only, in case of injury. Pistol is lightweight Ruger P97 .45.

Have your own copy of two of the greatest documents ever written: the Declaration of Independence and the Constitution of the United States-with all 27 Amendments including the Bill of Rights.



**Get your own copy.
Send \$3.00 to:
Backwoods Home Magazine
P.O. Box 712
Gold Beach, OR 97444
1-800-835-2418
www.backwoodshome.com**

particular need for the firing hand thumb to wrap around to the opposite side on an AR. With the lefty's thumb to the left, it should be perfectly placed to push the lever on its 90 degree arc from "safe" to "fire," and another 90 degrees to "full auto" if the southpaw is in legal possession of the selective fire/fully automatic version.

A righty speaks to the southpaws

This writer is very strongly right-hand dominant. However, being an "honorary southpaw" a couple of weeks per year has "raised my consciousness" in this regard. Having picked the brains of countless straight-shooting lefties over the last three decades, I would offer this advice to Denton Warn and other left-handed readers.

Yes, the right-handed majority got you again. They designed the guns

the same way they designed can openers and cursive script handwriting and all the other things to which you have so successfully adapted. The lifelong challenge that has been dumped on you continues.

However, your ability to overcome a world that is subtly prejudiced against you mirrors what law abiding gun owners go through, and adapt to. You have to do it twice over. I'm sorry about that, but I can't change it.

On the other hand (no pun intended), as we have noted above there is no significant disadvantage to the southpaw shooter that comes from the world of right-handed gun designers that can't be corrected for in an altered "manual of arms." Moreover, there are several design characteristics in the firearms world, as noted above, that actually give the southpaw an advantage over the "northpaw."

We Americans, accustomed to driving on the right side of the road in cars whose steering wheels are on the left, take a while to adapt in England and South Africa, where we must sit in the right front seat to drive cars on the left side of the road. It feels weird and unnatural at first, but we adapt.

So it is with the southpaw shooter. And, being used to adapting in a right-hander's world, the southpaw learns what black people have learned in white-dominated countries and what women have learned in male-dominated cultures.

They learn to, in the words of Clint Eastwood, "Improvise, Adapt, and Overcome." Δ

Want more Ayoob?
Check out his CD-ROM
on page 95.

Feel Safe?



- Custom Compartments
- Quick Access
- Faster Target Acquisition
- Secure Retention
- And room for a whole lot more!

**Law Enforcement, Probation/Parole,
Corrections & Civilian Safety**

Are You Ready for Everything?®

theHippack

Order Form

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ E-Mail: _____

Number of Hippacks: _____ @ \$59.95 each Total: \$ _____
Free Shipping, No Tax

Check or money order payable to: Integrated Safety Systems

Mail to: A&M Group, Integrated Safety Systems
634 Mendelssohn Ave. No., Minneapolis, MN 55427

Credit card: Order online at www.AssaultPrevention.org

Allow 3-6 weeks for delivery.

The Hippack carries a one-year guarantee against manufacturer defects and workmanship.

Ask Jackie

Castrating cattle, moving to a cabin, propane refrigeration, cleaning the grease out of range hoods, tipi living, using a pressure cooker as a canner, “recanning,” and low-yield tomato plants

We raise a few livestock, mainly for home use. We have a bull calf that we are keeping for beef. We were told to wait to castrate him when he was about 500 pounds, which he is now. I don't know whether that was a wise decision. I need your advice. What is the best method to castrate and since we don't have a chute, how is the best way to restrain the animal? I was told you had written a book on home vet work. If so, please let me know how to get it and how to castrate our bull.

Larry Estep
Gate City, VA

Whew! I'd get the guy who advised you to wait till your calf weighed 500 pounds to come over and hold him while you castrate him. (I mean the bull, now!) I usually castrate our bull calves, meant for beef, at about 150 pounds, where I can handle them nearly single-handed without a chute or cowboy.

I revised *A Veterinary Guide for Animal Owners*, which my late husband and I wrote 20 years ago. You can get this book from any bookstore. In it are described several methods of castration. The one I much prefer is the use of a “clamp” which pinches the blood vessels and effectively castrates the calf with no blood or cutting involved. It is not the “band” method, where a strong rubber band is slipped up over the scrotum, cut-

ting off all circulation. This can be dangerous, as tetanus and infections following this method of castration are all too common.

What I would recommend is that you have a veterinarian who has a portable chute come out and do the deed. These chutes tow behind a truck like a trailer. The bull calf is corralled, roped, or herded into the chute where he can be safely handled and castrated.

If this is impossible, I'm afraid I'd make young beef out of your bull before he gets too big for his britches, escaping from home and causing neighbor trouble, as they will often do. Next time, “pinch” that bull calf when he is much smaller and easier handled.

I have castrated such large bulls by roping them, haltering the animal with a stout halter, tying him to a fence post of a plank or pipe corral, then closing a strong gate up on his free side. With several helpers, one to hold the gate tight against the bull's side by using a rope behind his butt tied to the center of the gate, then run to a fence post on the other side for leverage, and another strong, fearless helper to hold the base of the bull's tail straight up over his back with as much power as he can muster. This immobilizes his hind legs to a great extent. Then he may be castrated with the Burdizzo clamps. **Never clamp**



Jackie Clay

both testicles at once. You must never clamp across the center division between the testicles. Do one at a time instead.

Again, this is *not* a safe procedure, and carries risk of injury. But I have done it several times when there was no other alternative available. I'd call the vet, myself. Good luck.

Jackie

My husband and I would like to know how to move to a cabin and is this a pipe dream or can it be done?

Judy Cheney
bluebird49@utahweb.com

You're darned right you can move to that cabin. While it is a dream, it certainly is *not* a pipe dream. I don't usually “sell” things, but I would suggest buying the *Jackie Clay CD* from *BHM*. On it are dozens of articles I've written, many of which pertain to moving to a backwoods home and living skills necessary to make your life there comfortable and enjoyable. It's \$12.95.

As you know, telling you the complete how-tos of moving to a cabin would take more than this whole magazine, but I can offer some useful suggestions:

- Work together, forming a realistic goal for your family.
- Pay off as many debts as possible, and contract for even fewer in the future.
- Rip up your credit cards.
- Plan well, considering the fact that *everything* takes longer and costs more than you expect it to.
- Of course constructive, creative thinking can certainly cut costs for everything.
- Buy what you can afford, rather than what you “want.” You can usually remodel your less than perfect piece of heaven into a wonderland—with work.
- Consider that anywhere you go, you will need at least a modest form of income and plan for it.
- Keep an open mind to the suggestions and help offered by locals who have lived in the area for some time; some are truly helpful and some are “know it alls.” What is *their* place like? Would you like your place to look or work like theirs?
- Plan on working hard for your dream; harder than you would work for others. It takes commitment. And endurance. And patience.
- Know that it *can* be done, and that hundreds of common folks are out there doing it. Right now. You are not “weird” or “nuts.”
- Pick up a copy of *Countryside Magazine* at the newsstand. It’s full of letters from just such people every month, telling what they’re doing, mistakes they made, and success stories of their triumphs.

Good luck in your dream. If you have specific questions regarding this move, please feel free to write.

Jackie

I would like to know when you make your move to the wilderness, how are you going to use your propane refrig-

erator? Are you going to use small tanks that you can bring in yourself? Do you plan for not using the gas refrigerator, and if so, what is it? I use a propane refrigerator and I do love it. But I would like to phase it out and be more self sufficient in the future. Any ideas?

Kathy Lupole
nikita@citlink.net

Yes, we do plan on using our propane refrigerator, at least during the summer months, when we make our move to the wilderness. We use it, and love it, right here in our almost-wilderness, here in Montana. We will use 100-gallon tanks, which can be hauled in via snowmobile or whatever transportation mode we are using at the time. But you’re right, using *any* fuel of this sort is not completely self-reliant. We could use an efficient electric fridge, powered by solar panels, but we are trying to be as economical as we can as well. The propane fridge and lights use about two 100-gallon tanks worth of propane a year.

In the winter in the north, a simple, insulated wooden cupboard fastened in a window will provide pretty dependable cooling until it gets warm outside. We’ve had pretty good luck sinking a large barrel in the ground, cooling it from a black plastic water line wrapped around it, which led from our spring to the house; the water was usually at about 40° or less, and kept food in the covered barrel nicely cold—sort of a poor person’s spring house. We did worry about a bear finding our outdoor fridge, however.

One seldom-thought-of idea is not to have a fridge at all. I know of people who have done this and been very happy with the arrangement. Cook only fresh food, and cook only enough to eat up or keep till supper in a cold cellar. Use only fresh milk, held briefly in that cold cellar, making butter every few days so it doesn’t

need to be refrigerated. Pick salad vegetables in the cool of the morning, and hold them until dinner in the cold cellar, then rinse well with ice water from the well or spring to “crisp” up. Only have home canned meats or small carcass meats during the warmer months so no meat must be held cold in the fridge. Chickens, rabbits, and fish are easy. Butcher larger animals in the cold fall and early winter months, when natural cooling is simple. It was the old way, and makes a lot of sense.

Jackie

I have a question that maybe you can help me with. What can be done about that miserable greasy junk that builds up on the range hood. I HATE the range hood, but it is needed. Nothing short of pure acid seems to clean the inside of the hood. Any environmentally safe suggestions? I have been at this hood for days with everything I have in the house. I am afraid I am now a toxic site!

Used one of your bread recipes from a back issue and it was the best. I added sunflower and pumpkin seeds to it!

Kelley Jane
bambis_revenge@yahoo.com

You can try this. It works quite well for range hoods and is a more natural approach. First of all, heat a big kettle of water on the stove. A canning kettle with the lid off is good. Really steam up the place, with the vent fan on to suck that steam upward. Then, with good ventilation, use straight ammonia and a steel wool pad without chlorine to scrub the hood. (Ammonia mixed with chlorine creates a poisonous gas.) If you still need help, mix a heavy ammonia concentrate with water that is as hot as you can stand working with. The hot water will help soften the grease crud. But this is never an easy, fun job. Make sure you change those filter pads regularly, as much grease will

collect on them and plug them up, making more grease collect on the hood itself. Also try to use a spatter screen while frying, as it will trap a large amount of grease before it drifts up into your hood.

Jackie

Have you ever heard of anyone selling everything to go live in a tipi on a piece of property while they build a cabin. We are considering doing exactly that.

When we were building our house here in Kentucky we lived in tents for four months. We survived ticks crawling all over the tents trying to get at us, a downburst (small tornado) right over us (destroyed our cook tent & popped open all our coolers) and an abnormal heat wave starting in June. I said I'd never do it again but... It's that homesteaders' adventure itch!

**Kathy Baker
Breeding, KY**

Sure, Kathy, I've heard of many people doing just that. Some of them made a great success of their adventure, and a few failed. But, because you have already had a taste of such an adventure, I'll bet your chances of succeeding are high. A tipi is actually quite an efficient means of housing year-round. But it does require picking a good tipi pattern and material. And you definitely will want an ozan, or liner, which keeps condensation from dripping, and improves circulation and heat in the winter. A very good book on tipi living is *The Indian Tipi, Its History, Construction and Use* by Reginald and Gladys Laubin. It gives hundreds of tips on how-tos and problems some people have encountered (usually due to defects in the tipi manufacturing or the lack of experience of the tipi dwellers).

After all, generations of Native Americans lived comfortably in tipis. But a tipi is not a house and you must adapt your lifestyle to the tipi while living in one. (Not much room for the

TV, VCR, and Game Boy.) But tipi living is a grand adventure, and the first time you come in from the dark, after seeing your tipi glowing like a huge lantern in the dark, still woods, you will know you are home.

Jackie

My wife and I bought an 8-quart pressure cooker/canner from Presto. The regulator weight has one setting: for 15 pounds. Of course the unit comes with an instruction booklet, but it is not terribly detailed. All the recipes in the Ball Blue Book and Putting Food By use 10 pounds as a reference for most foods. Is there a way to adjust the time to process, or do you know of any way we can adjust the cooker to 10 pounds? Using a different regulator weight?

My next question concerns recanning foods. I know that you can't refreeze food, but are there any health risks of re-canning? I have recently used tomatoes that we canned earlier this summer to make a batch of spaghetti sauce and then I canned about 15 quarts of that.

We had some huge tomato plants, over 8 feet high. There was a lot of foliage, but I think the yield was relatively small. We had 5 containers of tomatoes, one pepper and one cucumber. Should I have pruned the plants? How do you do this? I did pinch off the suckers all season. The soil was quite a bit of manure and good dirt. We also took vegetable waste that we pureed up in a blender to feed the tomatoes about once a week. We had a ton of green tomatoes at the end of the season and made 15 pints of chow chow (a relish condiment made with green tomatoes).

But I really would have liked more ripe tomatoes.

**Chuck and Denise Cline
twopatriots@peoplepc.com**

You know, I think I would call the Presto Customer Service Department (number on your instruction booklet).

The pressure cooker/canner that I think you bought is meant to be used primarily for a pressure cooker, but they advertise it as a canner, also. A larger unit is primarily a canner, meant for that purpose. Perhaps you could use a 10-pound weight, sold with the larger canner. But I wouldn't do it until talking to the Presto folks. Just in case.

No problem in recanning food other than a slight loss of nutrients. And I think that home canning fresh foods quickly and then recanning them would be about equal to the store cans of foods that have been picked over or underripe, hauled and mauled, stored for lengthy times, then canned. I recan foods all the time, as time allows. I, too, can tomato sauce, then later recan it, adding meat, making spaghetti sauce, soups, stews, chili, etc. I even have bought #10 cans very cheaply and recanned smaller jars of the store canned food. For instance, I bought #10 cans of pie cherries at a discount grocery for 99¢ a can, and recanned them into pint jars. They turned out just fine. As for the tomatoes from Jack and the Beanstalkland, I'd guess that you might have a combination of a fairly late variety of tomato and a heavily fertilized plot. Using a very fertile, manured garden plot, heavy with nitrogen will make for huge plants, lots of leaves, but little fruit. I'd wager a guess that by the time your plant used up the excess nitrogen and "got down to business," the season was just about over. Ditto for the one cucumber and single pepper. Sounds awfully suspicious, to me.

This year, I'd work the soil up well, and not fertilize it at all until you have tomatoes beginning to set well. Then as they grow, fertilize accordingly. And you might try a less tall, earlier variety, such as Goliath, Oregon Spring, or Early Cascade.

Jackie

Letters

(Dear Readers - Thank you for writing to Backwoods Home Magazine. The opinions and suggestions we receive from our readers are very important to us. We regret that we are no longer able to print or individually respond to every letter received due to the volume. We do read every letter received, and pass them along to the editor or writer concerned. We print a selection from our mail that best represents the views and concerns of our readers.

— The Editors)

Welfare trap

I only discovered your magazine six months ago and I love it! It's so nice to read a magazine that's not three quarters full of ads! I had to write in response to a reader, Carrie Rosamond in Denver, who wrote "Ask Jackie" in the Nov/Dec issue. She wrote that she saw no way out of the welfare trap she and her children are in. I was in that trap myself for a decade! I got myself off the system with the government fighting me every step of the way. A welfare worker once told me "Go home and collect your cheque like the others, you're causing me too much paperwork," because I had the nerve to ask for access to a program set up to help welfare moms get work! Now as a minimum wage working mother of 2 I'm poorer than I was on assistance. I held on to my dream and six months ago managed to put a down payment down on 72 acres of wilderness in the far north in Ontario. I'd move up there now but like a lot of city raised people I never learned to drive. It'll be several years before I can afford even a very cheap used vehicle. Until then for inspiration I read BHM from cover to cover several times over and watch the movie "Far and Away" a lot! I would love to write to other single welfare or working poor parents who want to homestead. Maybe several of us could start a sort of emotional support system through a writing circle as such. Please print my

full address for them to write to me. Thanks so much for your "down to earth" (pun intended) magazine!

Joeann Pearson
51 Apt. C Huron St.
Guelph, Ontario Canada
N1E 5L3

Eastern Kentucky

Sure enjoy your publication. I lived the first 34 years of my life in Eastern Kentucky. In 1991, I moved to Bowling Green in Western Kentucky.

Life in Eastern Kentucky develops a sense of self-reliance and independence. Rich, poor, and middle class alike have to deal with the remoteness, sometimes impassable roads, and power outages. I owned 19 acres back in E. KY. My home was ½ mile from U.S. 23. The home had 3 bedrooms, 1 bath, and a drilled well. Many times the water would freeze up or in summer the well would run low. Luckily there were close neighbors with dug wells that let me get water the old "drop the bucket and pull method" way. I remember the winter of 1977 that it snowed 2 feet and temps stayed between 10° and 20° for 3 weeks. Vehicles couldn't get in and out of the "hollow" where I lived. I rode my horse to the country store two miles away. My house had central heat but sometimes the power would be off for 2-3 days. Luckily, the house had a great fireplace with a 4-foot firebox. There was plenty of wood on my place plus E. KY is "coal country" so I had a big stockpile of good coal for the fireplace. Even when it got -20° and no power, my house stayed a comfortable 60-65°.

Now years later my family lives 300 miles from my little farm. We're in a subdivision now. But we try to maintain some self-reliance. On our one acre lot, I plant a good garden. We don't rely on fast-food, rather big

pots of soup and stews in the winter and fresh vegetables in the summer. We're the only family in the area who has a clothes line (which we use in warm weather).

My grandmother grew up on a 200 acre family farm. She taught me volumes of knowledge about home remedies, gardening, caring for animals, blacksmithing, etc. She was born in 1901 and died in 1993. I loved to hear her tell of the meals they had when she was growing up. They canned everything from homemade sausage, corn, green beans, tomatoes, and cured their own hams. They had a huge flock of chickens, ducks, and geese for eggs and meat.

My dream is to one day return to the woods and return to self-reliance. I have also listened to my grandma's advice regarding debt. She said "Never go into debt unless you can keep a roof over your head if hard times hit you." I have a very small mortgage payment. It astonishes me to see couples in their 30's and 40's who have a \$2,000 + per month mortgage. If one of them lost their job, they'd be without that fancy roof over their heads.

Bottom line is live within your means, don't let the media or "keeping up with the Jones'" sink you into debt, grow a garden (even apartment folks can plant vegetables in pots) and some smaller complexes will let you plant a little garden on their grounds.

Many people in the 30's-40's age group feel it is somehow degrading to use a clothes line or home-can food. How wrong they are. These activities relieve stress, get us outdoors, and provide learning activities we can do with our children.

Marcia Blohs
Bowling Green, KY

Fulfilling the dream

I just received my book order and the free anthologies which came with

my subscription renewal, and thank you for quick service.

We have read *Backwoods Home Magazine* for years and have purchased many books through your publication. We have dreamed and planned and prepared for our own "homestead," and at times really questioned the reality of the dream and possibility of ever accomplishing it.

It is ever so interesting in our quest for rural, self-reliant living, how these things come about. Needless, to say, when the opportunity was suddenly in front of us, we were and are not as prepared to jump as we thought we would be—of course, its timing and location have both been a bit of a surprise.

In September 2002 my wife was offered a job in Arvada, Colorado (that's a northwest Denver suburb). We hated the idea of moving to a major metro area, but also knew that in a few years it could possibly get us out of metro areas for good. Never could we have imagined that with this relocation we would find the ideal of both worlds!

We have found a small, 2.64 acre "homestead" with a nice spacious 1970s home, its own well, septic, and some out-buildings, and a few fruit trees. It is located in an unincorporated area north of Denver International Airport, an area unlikely to develop very much due to the paths of incoming flights to our east. It's a two mile plus drive on dirt roads to the nearest paved road and while I-76 is only a few miles further, just a 20 mile drive into work and only 5 or 6 miles to all the amenities of big city life. Still, with the exception of the in-bound airliners, there is no sign of being close to a major metro area when standing in our drive or on our porch. Even the city lights are over the hill and out-of-sight!

We have heard coyotes howl and have even had our dog answer them back. We have seen skunks and jack

rabbits and cotton tails running across the yard and have heard tales of rattlesnakes. A few mornings ago I stepped outside to see our neighbors pasture occupied by a small group of mule deer.

The space limitations have changed some of our plans, but the economics of raising livestock for home use is also somewhat limiting. We are planning a dairy goat and perhaps a calf to raise for veal each year, "grass lambs" to feed on the pasture all summer and butcher in the fall, and of course the standard poultry, game birds, and rabbits. Some expansion to the orchard and the addition of some berries should help fill the bill in the garden department.

I just wanted to let you and your readers know that it's possible to find that remote rural lifestyle and to fulfill the dream, and yet, stay close to the metro areas we love to hate and seemed tied to for employment or other reasons. Look around, and there, in the most unlikely place and while perhaps not ideal, one will find the dream.

Thank to *Backwoods Home* for helping us keep the dream alive long enough to find our place and for providing us the resources and knowledge to start making our dream our reality.

C. Reynolds
Commerce City, CO

Applause

This is just a note to say thanks for the great magazine *Backwoods Home* is. I sure don't remember how I came to find it but that really doesn't matter. I'm grateful to have it. I think I'm about to launch into a lengthy pistle here as I am wont to do when I'm talking to a friend about something I believe we share, so if you simply discard it now I wouldn't blame you any. Without going into detail about the things we absolutely agree on let me say this—I haven't found anything you have expounded on in the last two years that disagrees one iota with

the things I've been able to discover on my own. I will admit that my information comes happenstance and that my research expertise is at the D minus level, if that. However reading your articles is akin to listening to my own thoughts most of the time though, and it's wonderful to know I'm not the only person with these thoughts and feelings. I appreciate your encouragement. Please stay healthy and safe and keep it coming.

Grant England
Gales Creek, OR

Just a short note to let you folks know how much I look forward to and truly enjoy your magazine.

So often today people are quick to criticize or complain about a product or service but yet won't take time to say "Well done" to someone who does a great job.

You folks certainly are in the "Well done" category. I assure you, your efforts are not taken for granted.

Again, thank you and enjoy the upcoming holiday season. May your next year be full of joy and success.

Shawn Hutcheon
Depauvill, NY

I rarely take the time to express how much I like something impersonal like a magazine; but here it is. I enjoy each and every magazine. Even when my opinions differ from those of one of your writers, I feel that I've usually gained something from spending the time reading what I've read.

I've been a libertarian/anarchist/"outlaw" for many years now. I try to live my life by Rabbi Hillel's version of the Golden Rule (paraphrased): Don't do to others what you don't want others to do to you. The well-intentioned but controlling people on the left and on the right don't seem to get it; the writers at *Backwoods Home* do. It's as simple as that. Keep up the good work!

Walter Sharshon
walter@mailblocks.com